NATURE ROUND THE HOUSE

PAULINE WILSON

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NATURE ROUND THE HOUSE

Jay Bird.

NATURE ROUND THE HOUSE

BY

PATTEN WILSON

WITH ILLUSTRATIONS BY THE AUTHOR

NEW IMPRESSION

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Dedicated

TO

MY SMALL SON

THE WAD

WITH

LOVE AND ALL EARNESTNESS

PREFACE.

In writing this little book, my dears, it is my earnest wish to encourage in you all a love of Natural History; a more delightfully amusing study it would be difficult to find, but much neglected, and yet so necessary.

Should my wishes and hopes be realised by this little volume, it is possible, perhaps, that at some future time I may tell you of more of Nature's subjects, for instance, of those that are to be found on or near the sea-shore.

In this volume I tell you of but a few of the "beasties" of the garden, hedgerow and coppice, those that are most known and easily seen. To write of all would mean many volumes.

PATTEN WILSON.

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MR. FLY.

I SHALL first tell you about Mr. Fly, because I think that he is just the first thing that you may see on waking up on a bright sunny summer morning.

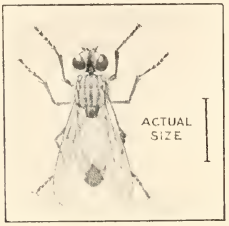
Something will tickle your face—(and it does tickle too!)—and you put up your hand to brush it away, only to find you have been too late, for it was Mr. Fly who was running on your face, and he is much too quick in his movements for you to catch him.

Now, watch! Yes, there he is, running over the counterpane as fast as his six little legs can carry him, to the patch of bright sunlight, where he will stand stroking his wings with his back pair of legs, and then washing his face and hands with the front pair of legs.

Now, Mr. Fly, or really Mr. House-fly, belongs to an order called DIPTERA, because he has but one pair of wings, and there are thousands of other flies which belong to the same order, some smaller than Mr. House-fly, some larger, and of many different shapes and colours and sizes.

His real name is MUSCA DOMESTICA. In colour he is grey, with darker bands of grey round his lower

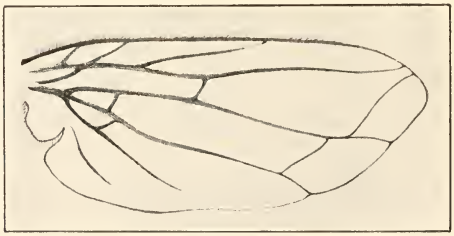
body or abdomen, and stripes of the same dark grey on his back or thorax, running towards his tail end. He has little hairs on his body and legs.



Mr. House-fly.

See, now! he has flown up to the ceiling, and is running along it. You cannot do that because your feet are not at all like his. His feet have hundreds of little hair suckers on their under surfaces, and that is the reason he can so very easily run on window-panes and walls and ceilings.

As I told you before, he has only two wings, but he flaps them so quickly when he flies, that while father's



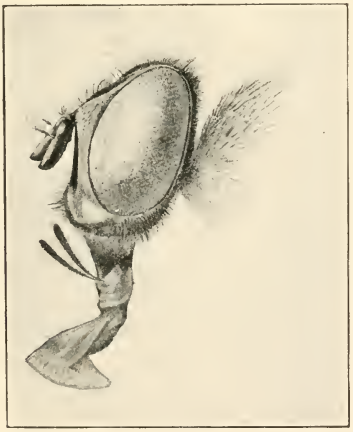
Mr. House-fly's Wing (enlarged).

watch ticks one second they flap or vibrate many hundreds of times!

His eyesight is so keen that he can see the least movement, and be off before you can say "Jack Robinson!"

His eyes are made of hundreds of mirror *things* called lenses, all touching one another. You cannot see these lenses, because they are so small that they can only be seen through a *thing* called a microscope.

Mr. House-fly is very fond of sweet *things* and milk; and when you are at breakfast see how he sucks with his proboscis at the sugar in the basin, and the cream in the jug; but the poor little chap



MR. HOUSE-FLY'S HEAD (ENLARGED), SHOWING PROBOSCIS.

often falls into the cream because his feet will not hold him properly on the greasy edge of the jug.

Because he is so fond of sweet *things*, he is caught with many of his brothers and sisters in glass bottle *things* which have sweetened beer at the bottom.

Fly lays many little white eggs in all kinds of dirt, and from these eggs are hatched little grubs called LARVÆ, which feed on the dirty *things* in which the eggs are laid, until they grow and become what are called PUPÆ, and, in time, these PUPÆ burst and out pop Mr. Fly's children ; and would you believe it, they immediately begin their life by worrying you in bed, mother and cook in the kitchen, father in his office, and grandfather asleep in his easy-chair. Ask grandfather if he likes Mr. House-fly.

THE SPIDER.

I HAVE just told you about Mr. Fly, and now I will try to tell you about another insect that is very fond of him and his relations, so fond of them that he clothes them in silk and eats them. This insect is Mr. Spider. But that is not his real name at all ; it is ARANEUS, and he belongs to the order ARANEÆ.

Now go into the garden, walk up one of the paths, keeping your eyes wide open all the time, and you will come to a beautiful web of silk attached to the twigs of a tree, and in the middle of this beautiful web you will see Mrs. Garden Spider head downwards, or, to give her real name, ARANEUS EPEIRA.

I want you to notice one little thing. If the spider's body is very very fat, you must say Mrs. Spider, because Mr. Spider has a much smaller body, though his legs are quite as long, and he can run much faster.

Now, look! and you will see that she has two parts to her body—the thorax, where the head and chest are, and the abdomen or fat part. You see that she has eight legs with hooks in the foot of each, which enable her to hang on to the fine silk threads that make up her web.

She has no separate head; I mean that she has no neck between her head and shoulders, they are both in one really; and on the top of her head she has eight eyes, but though she has eight eyes her eyesight is not so very very good.

Right in the front of her head, and pointing downwards, she has two jaws, each ending in a sharp fang, quite as sharp as a needle, and attached to a poison gland or bag further back. Here is a picture of her head and jaws, drawn much larger than they really are, so that you may see better how they are made.

At the end of her abdomen or fat part there are placed what are called her spinnerets, with which she spins the fine silk threads to make her beautiful web.

When she has made her web she usually sits in the very centre unless it is raining, and then she

goes to her den, which is generally formed of two or three leaves made into a kind of roof. From her den to the centre of her web she has a fine silk cord up and down which she goes, either to get to her den, or the centre of her web from her den.

I suppose you know that Mrs. Spider makes these beautiful webs to catch flies for her breakfast, dinner, tea and supper, though, of course, she does not eat

Mrs. Spider's Poison Fangs (enlarged) (*Front view*).

Mrs. Spider's Poison Fangs (enlarged) (*Back view*).

at regular times as you do. She is always hungry; I think she is now, so we will catch a fly for her. Ah! yes, here is one sitting on this leaf; keep quiet and I will catch him! Here he is, you see, between my finger and thumb. See, I throw him gently into the web. He cannot get away, for the silk threads are covered with a very sticky juice, and though the fly struggles with all his might, he only becomes more and more entangled. Mrs. Spider instantly feels

when a fly has blown into her web, because her feet are so sensitive to the least touch that she knows at once where the fly is. Down she runs to where he is, bites him with the poison fangs, which soon make him feel numb all over, and he suffers no more pain. When she is quite sure that he will not struggle any more, she carries him up to her den and begins to suck all the juices out of him just as you would an orange.

There! I have thrown another fly into the web, and here comes Mrs. Spider, dropping quickly to the middle of the web and jerking it sharply with her eight legs to find out where the fly is; then, as you can see, no sooner does she know where he is than she darts upon him, bites him with her poison fangs, and winds sheets of beautiful white silk round him from her spinnerets, turning him round and round with her feet all the time.

She leaves him hanging in the web and goes back up the connecting cord in a kind of jerky walk, to continue her breakfast on the first fly we put in.

When she has eaten all she can of her breakfast, she sucks her toes clean and goes down for the other fly.

I have a very large Mrs. Spider at home, who has made a most beautiful web in the Virginia creeper which hangs over my porch, and I feed her several times a day with flies. She knows me quite well, and will even take flies out of my fingers, but, of

course, that may be "cupboard love". Ask mother what "cupboard love" is!

My Mrs. Spider makes her web too near the door, and when my friends come to see me they sometimes tear it, and, of course, when it is torn she does not

Mrs. Garden Spider.

take the trouble to mend it, but makes a new one altogether during the night. Here is her portrait.

Mrs. Spider lays eggs in a little silk bag which she makes, and out of these eggs are hatched wee little baby spiders, and they break a hole in the silk bag and run here and there as though they did not know quite where to go.

As the baby spider grows bigger his skin becomes

too small for him, so it splits, and he comes out of it clothed in another skin, which is quite soft, but which, in a day or two, becomes quite as hard as the old one. The baby spider is just like you, for as you grow out of your suits of clothes father and mother give you new ones, each little suit larger than the last, until you are full grown. So it is with the baby spider. My father often said that he wished we boys and girls were spiders, for the reason that we should be obliged to make our own clothes!

MR. WASP.

HAVE you ever seen a big yellow and black fly stealing the preserves from the dish at your tea table? Because if you have, you may safely say, "How do you do, Mr. Wasp?" His name, Wasp, is not exactly as pretty as that of a sort of cousin of his, Mr. Bee, nor is he as useful; however, I will show you that he is not quite as bad as he is represented.

To begin with, I must tell you how he is formed. His body is made up of three principal parts—his head, his thorax or chest, and his abdomen.

His family name is HYMENOPTERA, and he and his many cousins are given this name because their

upper and under wings on each side are linked to gether by many tiny hooks.

His own particular name is VESPA VULGARIS.

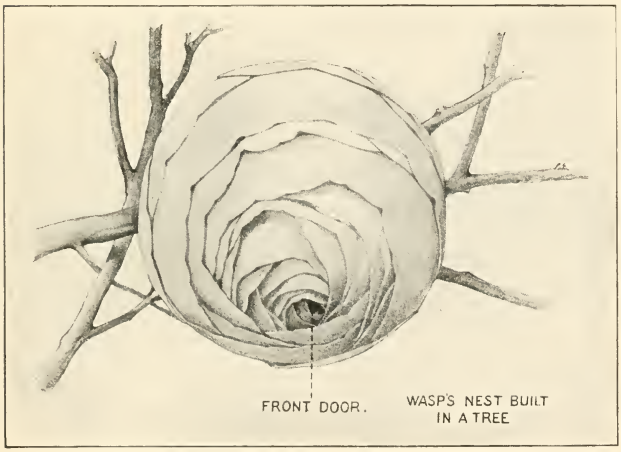
He has six beautiful yellow legs which he can use very quickly indeed. His eyesight is very keen, because like Mr. Fly, his eyes are made up of thousands of lenses.

Mr. Wasp lives with his brothers in nests, in hollow trees, and holes in banks, and hedges and walls. Sometimes they build beautiful nests of a paper-like

material, which they themselves make out of decayed wood. Here is a picture of one hanging to a branch of a tree.

When father takes a wasp's nest from the bank under the hedge in the garden, he will show you the "cake" or "comb," and you will see that it is made up of hundreds of "cells" or pockets, and in each of these cells, when the top is taken off, you will see a wasp "grub" just like a perfect wasp, only it is a beautiful white colour, and the wings beginning to show.

The wasps, when they make their nests, have a queen, who lays all the eggs; each egg is laid in a cell, and when the eggs are hatched the grubs, which are then like little white sausages, are fed by the other wasps until they are old enough. Then they are all sealed down to grow into the perfect wasps.



The grubs then set about forming themselves into the perfect insect, and it is during that time that father took the nest and showed you the "cake".

Soon, however, the covering to each cell breaks, and out pops a Mr. Wasp in his beautiful black and yellow armour.

Boys take wasps' nests on purpose to get the "cake," which they bake for a little while in an oven,

and then pick out the grubs to use as bait for their hooks when they go fishing.

Mr. Wasp feeds on all the good things he can find, and nasty things too. He likes butchers' shops because he is fond of good beef and mutton. He likes grocers' shops and stores, and I daresay you have seen lots of them there when you have been with mother shopping. He eats sugar, treacle, preserves, cake, pears, apples, plums, dates, figs, and in fact nearly everything that he can get hold of. He does not in the least mind what he drinks, and I am very sorry to say he is very fond of wine and beer and stout, and country people say that after he has been drinking the fermenting mashes which will presently be nice home-made wine, his sting is more painful than at any other time. I have not tried it, and I don't think I shall make the experiment just yet, though I have been stung hundreds of times when I was a boy and went out with my boy friends to find and take wasps' nests, which is a very exciting form of fun.

Waspy likes eating some live insects. I have seen him come into the kitchen on a warm summer day and pounce on a fly sitting on a beam in the ceiling, and then fly out of the window to his nest, and come back for more. He does not carry off the fly in his mouth, but holds him with his six legs.

Then again, while working in the garden, I have seen him suddenly pounce on a common white butter-

"Mother will rub the Blue Bag on the place."

fly, bite off its wings, and fly away with it to his nest. But of course I do not mind his eating as many of that kind of butterfly as he can, because it is so fond of laying its eggs on the underside of the cabbage leaves, and the eggs in turn become caterpillars, which eat up the cabbage, leaving nothing but the veins of the leaves.

Mr. Wasp's sting he uses as a weapon of defence, just as a soldier uses his bayonet in war; and when he does use it, it does not feel at all nice, in fact it is most horrid and painful, just like a hard needle prick, only more so.

So if you are ever stung on your hand or arm, the place will swell very quickly, and begin to throb and ache. But don't cry if you can help it, crying will only make it worse, but run as quickly as you can to mother, who will rub the blue bag on the place, and it will soon be well.

Mr. Wasp does not sting me at all now, and do you know why? Because I don't let him.

I am so sorry I mustn't tell you how to take a wasp's nest; father would be angry with me if I did. He will tell you one of these days if you are very good.

THE BUTTERFLY.

THERE are many kinds of butterfly, far too many for me to write to you about in this little book, so I shall

content myself by telling you of one, Mr. Common White.

He belongs to the order LEPIDOPTERA, because his wings are covered all over with tiny feathery scales. Of the order LEPIDOPTERA there are many families; Mr. Common White's name is PIERIS BRASSICÆ. You will really get quite "mixed" with all these curious big names!

He feeds principally on the cabbage, and also sucks

MR. COMMON WHITE BUTTERFLY (SLIGHTLY REDUCED).

the sweet honey juice out of the flowers in the garden and fields. Here is a picture of him.

Farmers and market gardeners do not love Mr. and Mrs. Common White, because, as I told you before, they destroy so many cabbages. When the eggs are laid on the leaves, they are hatched by the warm sun, and little grubs come out of them called LARVÆ. When the LARVA has eaten enough cabbage, and has grown big enough, it attaches itself to the underside of a leaf, and there its skin shrivels up and

bursts, showing a brown, shiny, hair-cased object like a cigar in shape, only very much smaller, called a CHRYSALIS or PUPA. Then after a time this PUPA splits at the thick end, and out comes a Mr. or Mrs. Common White, who sits in the sun for a little while until its wings are properly straightened out and strengthened by the warmth ; then when it feels strong enough, away it flies.

You will see from the picture that Mr. Common White has four wings, two upper wings and two under wings, the upper wings being much larger, and of a different shape from the under wings. These wings are covered all over with millions of tiny white feather-like scales.

COMMON WHITE'S HEAD (SLIGHTLY ENLARGED).

If you take a Mr. Common White in your hand, as I have no doubt you have done at some time or other, you will notice on the tips of your fingers a little shiny white dust ; these are the feathery scales which cover its wings. If all these scales were rubbed off the upper and under sides of the wings, the wings themselves would be almost transparent—that is, you could almost see through them, but the poor Mr. Common White wouldn't be able to fly. Like

Mr. Fly, Mr. Wasp and thousands of other insects, Mr. Common White's eyes are composed of very many lenses, and he sees so well and is so quick that I don't think you could catch him if you tried for a whole week. You can, however, catch him in a butterfly net, which is made of a piece of fine green gauze made into a bag, round the mouth of which runs a stout piece of wire, fastened to a long bamboo cane. If father has time, he may perhaps make you one if you promise to be good for a whole day, and you can then run about the garden and fields and catch lots of butterflies of all kinds, and father will show you how to kill them and set them up as you see them in the Natural History Museum at South Kensington in London, or at any other museum in a large town.

When father and mother come up to London on a visit to Uncle Dick and Aunt Sophia, you must ask them, when they have time, to take you to the Natural History Museum for an hour or two, and you will see there hundreds of butterflies of all kinds, sizes and colours, besides many other insects and animals quite as interesting, if not more so.

THE COCKROACH.

Before I tell you anything about Mr. Cockroach, just run down into the kitchen and ask cook what she thinks of him. Our old cook told me when I

was a boy and asked her the same question, that cockroaches were "Nasty 'orrid varmint," and so they are. Some people will tell you that Mr. Cockroach will eat the edge of a razor. He must have a strong stomach—don't you think so? And I am sure that razor edges do not sound very nice things to eat, especially when you are hungry.

Mr. Cockroach and his family live in the kitchen and downstairs part of the house—not every house though, which is a very good thing—and feed on all sorts of crumbs and bits of food on the floors and tables.

One of the most curious things about Mr. Cockroach is, that though he has wings he is not often seen to fly. I have never seen him fly. There is really not much need for him to fly, because he finds his food without doing so.

During the daytime he lives under the boards of the kitchen floor, and in cracks in the walls and such-like places, coming out only at night in search of food.

I have on several occasions gone downstairs at night to see that the house was safely fastened up before I went to bed, and heard the cockroaches running over the floor, making a noise like the gentle rustling of leaves. Then, on turning up the gas, I have seen hundreds of them, running like mad to their hiding-places. Here is one of them drawn a little larger than it really is.

Though we call him Cockroach, his real name is Periplaneta Orientalis, and he belongs to the family called Blattidæ, and is supposed to have come from the tropical parts of Asia.

Cockroach's Egg-case.

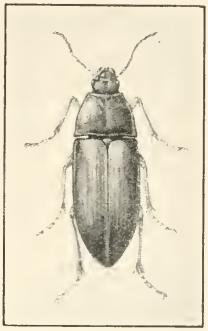
Mrs. Cockroach (don't you think she should be called Mrs. Henroach ?) lays eggs, but instead of laying separate eggs, she lays a hard shiny brown

Handbag.

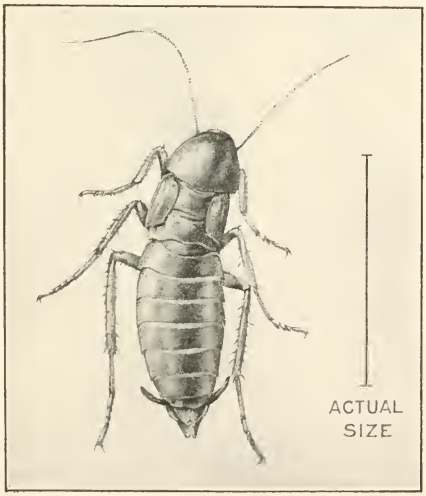
case full of eggs, and this egg-case looks like a brown leather handbag without the handle. This egg-case she deposits in various places, in some crack in the wall or under the floor boards ; and there the young

are hatched out, shedding their skins every now and then as they grow bigger.

Mr. Cockroach and his family are nearly always called "Blackbeetles," which is not correct; they are not beetles at all, nor are they black, but dark brown. Beetles belong to the order COLEOPTERA, and cockroaches to the order ORTHOPTERA. Here are portraits of both Mr. Blackbeetle and Mr. Cockroach, so that you may see the difference.



BEETLE.



COCKROACH (SLIGHTLY ENLARGED).

There are cockroaches on board ships, and in the old sailing vessels they are very fond of sitting down to meals with you, which is not at all nice of them, especially when they are in your plate.

THE ROBIN.

Of course you know a Robin when you see one! He is one of the jolliest little chaps in the way of birds we have in England. He hops, he skips and he jumps all over the garden, on to the doorstep and window-sill. He seems always happy and smiling, whether the weather be warm or cold, and he is not at all afraid of human beings; but that must be because he is never hurt or killed by them. Only very bad boys with catapults sometimes try to shoot him.

Many years ago when I was a boy I always carried a catapult in my pocket and some large shot, and one day while walking along the side of a hedge I saw a little bird inside the hedge with his back towards me, so as I had some kestrel hawks at home to feed, I let fly a shot from my catapult and killed the little bird, and when I picked it up I found it was a poor dear little robin-redbreast. You cannot know how very sorry I was; I am sorry now, and can never quite forgive myself for killing him. When I reached home in time for tea my father saw that I was sorry for something I had done, and he asked

THE BAD BOYS WITH THEIR CATAPULTS.

me what it was, and I told him. So after tea he took me into his study and talked to me for a long time very seriously. I have not killed another robin-redbreast since.

Mr. Robin-redbreast's name is ERYTHACUS RUBECULA. He is what is called a perching bird, and of the WARBLER family.

In colour he is olive-brown on his upper parts. His forehead, throat and breast are a bright orange-red colour.

When winter comes on, many of Mr. Robin-redbreast's relations fly away to warmer countries, but many stay with us all through the winter and warble their pretty songs to us, asking for crumbs.

In the spring Mr. and Mrs. Robin-redbreast think about building themselves a house, which they do most cleverly of moss, old dry leaves and dried grass, and they line all the inside with hair to make it nice and warm.

They are not at all particular as to the place in which they build their nests. I have found their nests in old tin cans, old hats, and I forget where else.

Several eggs are laid in the nest. They are white, splotched and streaked with red.

While Mrs. Robin is sitting on her eggs in order to hatch out the little robins, Mr. Robin sits in a bush or tree close by, and sings to her a very pretty little song; and sometimes he takes her place on

the nest while she flies about to get some food, for it is very hungry work sitting all day on eggs, and eggs must not be allowed to get cold, or there would be no little baby robin-redbreasts.

Soon the eggs are hatched, and then both Mr. and Mrs. Robin work so hard from the dawn of day to dusk in finding grubs and flies and beetles and worms for the little robins, that, by the time the young robins are ready to leave the nest, they begin to look quite ragged, and are not nearly so pretty as they were when they were building their nest.

They have to work quite as hard when their children are fledged and leave the nest, for the little ones do not yet know where to find the insects and grubs and worms which are good for them, so, of course, the poor father and mother have to fly here and there to find food for them, and they often go hungry themselves in order that their little children may have enough.

Then, of course, the young robins must be taught how to fly properly, and it is really a most pretty sight to sit on the garden seat and watch father and mother robin flying from branch to branch, twig to twig, and calling the little ones to follow. It was just as funny and jolly to watch you learning to toddle when you were a wee baby.

When the little robins are fully fledged, that is, have all their feathers and able to fly about, they do not look a little bit like their father and mother, for

instead of bright orange throats and breasts, they have throats and breasts of dirty browny yellow, flecked or splashed with darker brown spots. Later on, however, they moult or shed their first feathers, and then they look exactly like father or mother, so like, in fact, that you do not know which is father, mother, son or daughter.

Mr. Robin is very fond of fighting, and he does not care a bit how big the bird may be with whom he is angry; not a little bit, he squares up to him with all his feathers ruffled up in a perfect rage.

He will even fight the saucy and spry Mr. Cock Sparrow, whose beak is much stronger than his. I have seen two Mr. Robins fight on our lawn until they were so exhausted or tired and done up that they both fell down; for when they fight they really mean it, and sometimes one will kill the other.

Some people call our soldiers robin-redbreasts because of their red coats; and indeed they are just like Mr. Robin-redbreast, for they will fight and fight until they drop and never own that they are beaten; and that is one of the reasons that our British Empire is as great and glorious as it is.

When the winter comes and the snow covers all the ground, you must ask cook to give you all the crumbs she can, and you must put them on the snow on the window-sill for the robin-redbreasts to eat, and they will sing their thanks to you every morning. If you forget one morning to put out some crumbs

for them, they will perhaps tap on the window-pane to remind you of your forgetfulness.

One little Mr. Robin-redbreast used to wake up my mother every morning very early by tapping on the window-pane and singing immediately after. He knew when he had a good friend.

Do you know this little song?

Who killed cock-robin?
I, said the sparrow,
With my bow and arrow,
I killed cock-robin.

Who saw him die?
I, said the fly,
With my little eye,
I saw him die.

Who caught his blood?
I, said the fish,
With my little dish,
I caught his blood.

Who'll make his shroud?
I, said the beetle,
With my thread and needle
I'll make his shroud.

Who'll dig his grave?
I, said the owl,
With my spade and shov'l,
I'll dig his grave.

Who'll toll the bell?
I, said the bull,
Because I can pull,
I'll toll the bell.

Who'll be the parson ?
I, said the rook,
With my little book,
I'll be the parson.

Who'll be the clerk ?
I, said the lark,
If it's not in the dark,
I'll be the clerk.

So the birds of the air fell a-sighing and a-sobbing
When they heard of the death of poor cock-robin,
When they heard of the death of poor cock-robin !

THE SPARROW.

Of all the saucy, impudent, persistent, naughty little birds, Mr. Cock Sparrow is the very worst; he makes himself hated all over the country because he is so very very naughty.

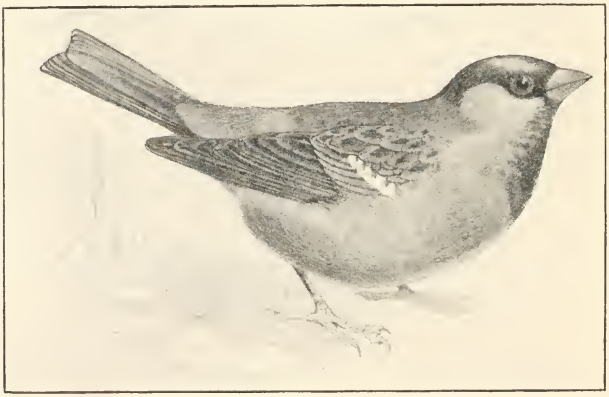
He is everywhere; but with all his faults he is a fine little bird to look at, with his knowing, twinkling eyes, and hopping here, there and everywhere as much as to say, "My name is Jack Sparrow, and don't you dare to forget it !"

He is another of the perching birds, and belongs to the Finch family. His real name is Petronia Domesticus, and is found all over England, Scotland, Wales and Ireland, and other parts of the world.

When next you walk past Farmer Blenkinsop's farm, and you see him leaning over his pigsty fence,

chewing a straw and thinking how much he will be paid for each of his little pigs, ask him how he likes Jack Sparrow, and listen carefully to what he says. He will very likely tell you that he wishes there were no such bird alive.

Jack Sparrow is coloured chestnut-brown on the upper parts of his body, striped with black on the



Sparrow.

upper part of his back. His head is blackish grey, with whitish cheeks, and his throat and part of his neck are black. The under parts are greyish white.

When spring-time comes, Mr. and Mrs. Jack Sparrow build a most untidy nest of anything they can pick up—bits of grass, hay, straw, bits of cloth, feathers, in fact all kinds of rubbish; and in the nest Mrs. Jack lays her eggs, which are rather dirty

looking, being greenish grey in colour splotched with grey and brown.

The first brood is hatched out and leaves the nest in the month of May, and in its place more eggs are

Sparrow's Feet (enlarged).

laid and hatched, so that several broods are hatched during the year.

In the early part of the year their food consists of all kinds of insects and grubs, and as most of these

little things are found on the buds on the fruit trees and plants, Jack Sparrow does as much harm almost as good, for he has to bite the buds off in order to get at the insects.

Even your father has no love for Jack Sparrow and his relations, for as soon as he has sown his rows of peas, Jack and his wife and his children, and his uncles and cousins and aunts, fly down and pull them up as soon as his back is turned.

If they do leave the peas alone when they have just been sown, it is not for long, for as soon as the young shoots begin to show above the ground, down come swarms of Jack Sparrows who pull them up and eat them. So if father loses a few rows of peas from the garden, how many rows of peas must Farmer Blenkinsop lose? They eat nearly all the seeds that are sown.

Then when autumn comes round and the fields of wheat and oats and barley are cut, countless numbers of Jack and Mrs. Sparrows swarm to the corn-fields, and sit in the corn sheaves and eat the grain out of the ears as fast as they can.

Even the town Jack Sparrows fly in swarms to the corn-fields, and do just as much damage as their country cousins.

Not only does Mr. Jack Sparrow eat the grain out of the sheaves, he does not wait until the corn is cut, but eats it as it is standing waiting for the reaping machine.

Farmers are obliged to give boys old guns and powder with which to make a noise to frighten the sparrows away.

The sparrow family has increased in numbers so much, and does so much damage, that it is now called VERMIN, like rats and mice; and in villages labouring men and boys and all farm hands are given a certain sum of money for every dozen sparrows they kill, and also for every dozen sparrows' eggs they find.

Jack Sparrow likes building in ivy, and sometimes at night you can hear him talking in his sleep.

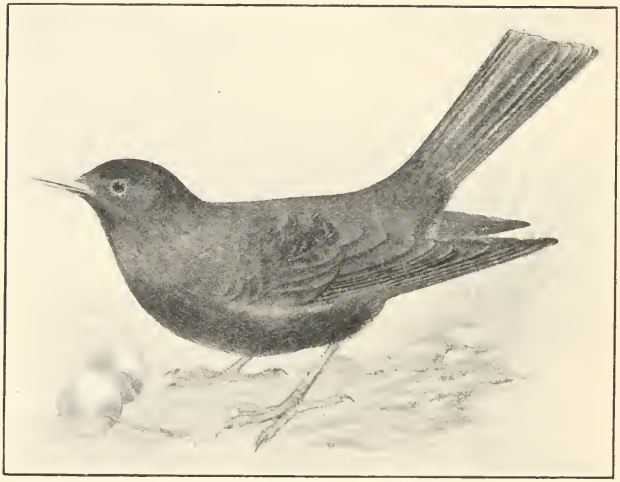
If a rain-water pipe becomes stopped up, and the water runs over the edge of the gutter, you may be almost sure that Mr. and Mrs. Jack Sparrow have built their nest in the spout.

There is no end to the mischief that he does; in fact he is every bit a little RASCAL!

THE BLACKBIRD.

QUITE a different bird is Mr. Blackbird, for though he is quite black all over, his nature is not. He is not in the least like Jack Sparrow, who persists in poking his inquisitive little beak everywhere he is not wanted. Instead, Mr. Blackbird is very shy, and flies away whenever he sees you coming in his direction.

Mr. Blackbird is another of the perching birds, of the family TURDIDÆ, and his own name is MERULA VULGARIS. In colour he is all black except his beak, which is bright yellow. Like other birds Mr. Blackbird's clothes are much more beautiful



BLACKBIRD.

than Mrs. Blackbird's. Her colour is a dusky brown on her head, back and tail, and reddish brown on her throat and breast, and she has not a yellow beak.

Mr. and Mrs. Blackbird make a very nice warm nest of moss, grass and dead leaves in hedges, trees and bushes.

Mrs. Blackbird does most of the building work.

When the nest is finished Mrs. Blackbird lays from four to five bluish-green eggs dotted with light brown, and then she sits on them while Mr. Blackbird sits on a bush or tree close by and sings to her a most beautiful song—rather a short song, it is true, though some of his notes are exceedingly sweet and strong. He takes his turn in sitting on the eggs in order to hatch out the young ones, which, when hatched, are fed by the "Old Ones," as we say in the country, with worms, grubs, beetles and other insects. When the young blackbirds are old enough to leave the nest to try to fly, Mr. and Mrs. Blackbird are most worried, because then is the time that Tabby Cat knows she can get a very easy dinner, for Tabby Cat likes a bird or mouse better than all the milk in the world. The young blackbirds sit on the ground under the bushes, every now and then calling their father and mother with a funny little "chirrup" noise, like a whistle blown once and sharply in a basin of water. Tabby Cat hears that little chirrup, and creeps, with her stomach close to the ground, quietly towards the young blackbird till she is within two or three feet of him, then pounces like lightning on the poor little chap, who then cries for his father and mother most pitifully. When they hear his cries, both fly shrieking in and out of the bushes, and round Tabby Cat, who runs away into some corner to eat the poor young blackbird she has in her cruel mouth. Long after this the

poor father and mother cry for sorrow that their poor weak little son has been so cruelly taken away from them.

Mr. and Mrs. Blackbird are very brave when they have little ones in their nests. I have seen them keep Tabby Cat away from their nest by flying round her, screaming all the while and pecking at her head; and once I saw two Mr. Blackbirds and two Mrs. Blackbirds actually drive Tabby Cat right away from a nest of young blackbirds. Once a pair of blackbirds tried to frighten even me away from one of their children who was sitting on the ground, and I was only standing close by, watching him as he sat on the ground waiting for his mother to bring to him a nice fat caterpillar she had in her beak. Any one would think they knew I rather like blackbird pie; anyhow they did make a noise, but the young blackbird did not mind me in the least. You see, he did not know quite as much as he does now, because his father and mother had not taught him to be afraid of people.

Mr. and Mrs. Blackbird are not guilty of doing very much damage, so no one but naughty boys with catapults, or men with guns, hunt them. The naughty boys only kill them, as they do all other birds, for what they very stupidly call SPORT; but it is not sport at all, but very great cruelty. The man with the gun kills them sometimes because he likes blackbird pie.

"Four-and-twenty Blackbirds baked in a Pie."

Do you remember the nursery rhyme?

Sing a song of sixpence,
A pocketful of rye,
Four-and-twenty blackbirds baked in a pie ! ! !
When the pie was opened
The birds began to sing,
Was not that a dainty dish to set before the King?

The King was in his counting house
Counting out his money ;
The Queen was in her parlour
Eating bread and honey,
The maid was in the garden
Hanging out the clothes,
And along came a blackbird
And pecked off her nose.

It is rather a funny rhyme, and I rather fancy the blackbirds sang when the pie was opened, because they were very glad to get out again. How startled the king must have been when they all flew out and round his head. And don't you think the maid must have had a very red and shiny nose, and that the blackbird thought it was a bright, ripe cherry.

It must have been very awkward for the maid, and how funny she must have looked without a nose of any sort.

THE THRUSH.

Mr. Thrush is one of our most delightful song-birds, and he belongs to the same family as Mr. Blackbird. His name is Turdus Musicus.

Mr. and Mrs. Thrush are quite alike in colour, being dark brown on the upper parts and whitey brown on the throat, breast and under parts. The throat, breast and under parts are also thickly spotted with dark brown.

They build their nests in bushes and shrubs and trees, and sometimes on an ivy-covered wall. They are really not very particular where they do build.

Young Thrush.

Last year I saw a thrush's nest in an old hat on a table in a disused summer-house. Another nest I saw built on the prongs of a wooden hay rake which was hanging up on the inside wall of an open shed. Another nest was built in a ladder which was hanging on the inside wall of another shed. Another nest was built in a fruit basket in the same shed. I think I saw four or five nests in the same shed, and all had eggs in them.

Mrs. Thrush lays four or five bright blue eggs, spotted with very dark brown, and Mr. Thrush sits on them when Mrs. Thrush wants to get off the nest to get food and stretch her wings and legs, for it must be very tiring work sitting on eggs for hours at a time.

Both Mr. and Mrs. Thrush work very hard at feeding their young ones when they are hatched, and really young thrushes seem to be very greedy, for I have taken a large worm to a nest where I knew there were young ones, and dropped it into the mouth of one of them, and it was gone in a twinkling of your eye.

They seem always hungry; and if you go close to the nest they pop up their heads, stretch their naked little necks, and open wide their great big mouths, expecting some grub, worm or insect, for they think that you are their father or mother coming to feed them. Tabby Cat likes young thrushes very much, and kills many of them.

When they are first out of the nest the young thrushes are very awkward-looking little things, and if you creep quietly up behind one you can catch him quite easily; only if you do, please do not squeeze him too tightly or hurt him; just have a good look at him and put him quietly down again. He is sure to be a little frightened and chirrup a little, but so would you if a giant as big as a church were to take you up in his great big hand.

Mr. Thrush has a most beautiful song which he sings to Mrs. Thrush while she is sitting on her eggs, and sometimes he seems to be singing real words to her. Listen to him next time the nesting season comes round, and you will then see what I mean. He sings several tunes, one after another—"DIRTY EGG! DIRTY EGG! DIRTY EGG! DIRTY EGG!" and then immediately after, "GET IT CLEAN! GET IT CLEAN! GET IT CLEAN!" I suppose he says that because one of the eggs in the nest is a little dirty, and he is very angry about it. Then when he sees that poor Mrs. Thrush is getting a little tired, and he does not feel inclined to take her place on the nest just yet, he sings very earnestly, "STICK TO IT! STICK TO IT! STICK TO IT! STICK TO IT!" but when he sees that he is very selfish and that she is really very tired, he is very sorry, and at last flies down to the nest, and then Mrs. Thrush is able to have a little rest.

In the winter time the cold weather makes Mr. and Mrs. Thrush quite tame; so tame, indeed, that they will sit on the window-sill or doorstep and wait for food, which, of course, you will give them every morning before you have your own breakfast. You will now, won't you? Promise me you will!

THE MARTIN.

Mr. House Martin belongs to the Hirundinidæ family, and his real name is Chelidon Urbica. He does not live with us all the year round, for he is a very "fashionable" bird, living in Africa during the winter months, coming to pay us a visit in the spring—a visit which lasts until he knows that the cold weather is coming on.

Mr. Martin is really a very pretty little bird. His head is black on the top and sides, his back, wings and tail are black, and his rump and all his under parts, chin and throat pure white. His beak is very small, and his eyes are bright and shining.

Unlike all other birds you see about the house and garden, Mr. and Mrs. House Martin build their nest of mud. Just think of it! Mud! It is most curious and interesting to watch them building.

In the spring-time when they come to see us, you may see them flying up to the eaves of the house, the place where the roof stands out beyond the walls, then flying down again, then up to another part. This they do for quite a long time in order to find a nice place in which to build their nest.

When at last they have found a place they like, they fly off to a puddle in the road, or to any other place where they can find mud, settle on the ground and push their little beaks forwards in the mud until

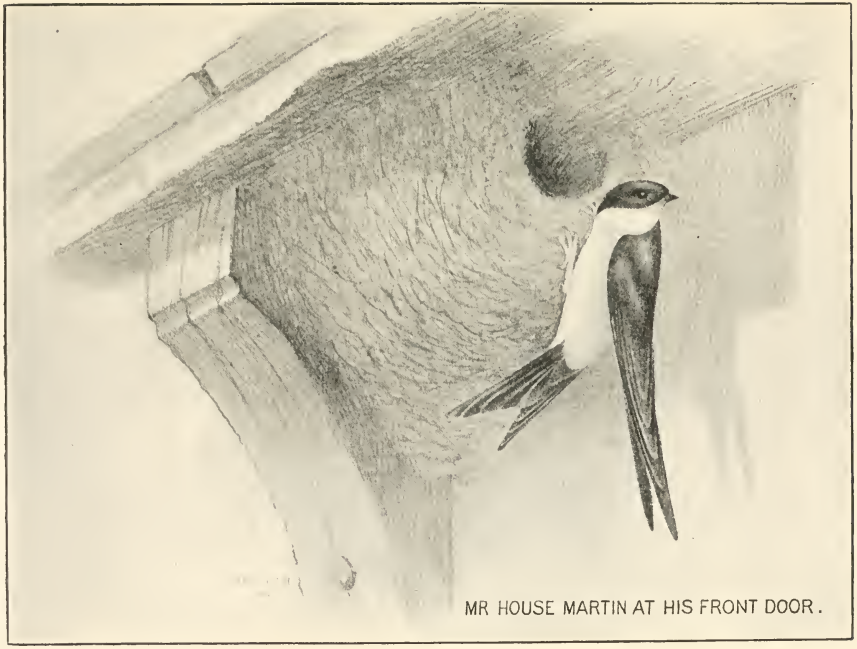
there is a dab of it larger than a pea on the end of their beaks. Off they fly then to the place under the eaves they have chosen, and dab this little pat of mud on the wall, and so on, and so on, until they have quite a large piece of the nest built.

Then one stays behind and works at plastering and smoothing, while the other one brings the mud from the puddle. So they work, and work very hard, until the outside of the nest is done. In the angle where the eaves meet the wall there is a little hole left in the nest, so that they may go in and out.

This hole is the front door. When the outside of the nest is done, Mr. and Mrs. H. Martin set to work to line it with nice soft feathers to make it nice and comfortable for the little ones.

Now is the time Jack Sparrow comes along, as usual always up to mischief of some kind; for while Mr. and Mrs. H. Martin are away looking for feathers he pops into their unfinished nest and waits till they return. What a fuss they make, to be sure, when they find there is someone else in their newly-built nest. They know, poor little birds, that it is no use to think of getting Jack Sparrow out, because he is so very strong and fond of fighting; so poor Mr. and Mrs. H. Martin fly away to make a nest somewhere else.

Sometimes Jack Sparrow gets caught in a trap, and is very sorry for himself, for Mr. and Mrs. H. Martin, just to pay him out for his wickedness, go



MR HOUSE MARTIN AT HIS FRONT DOOR.

back to the puddle and plaster away at the front door while Jack Sparrow is inside, laughing to himself and thinking what a fine joke it all is, until, hey, presto! as the conjuror says, the front door is suddenly sealed up with mud, and he is a prisoner, never to get out again, and he dies in the house he so wickedly stole.

Mrs. House Martin lays her pure white eggs in her nice soft-lined nest, and hatches out her little children. It is very pretty to watch Mr. H. Martin talking to his little wife while she is sitting on the eggs, her little head just poked through the front door, and Mr. H. Martin hanging by his little claws to the outside of the nest. It would seem as though they were having a real talk.

Their food consists of insects, which they catch while flying in the air. They do no harm whatever, and no one ever tries to kill them except the bad boy with his catapult, and he might just as well try to hit Mr. Fly's nose a mile off as to hit Mr. Martin while he is flying.

Mr. H. Martin has a cousin who is Mr. Swallow, whose habits are very like his. Mr. Swallow is a little different in colour, being purply grey-blue on the upper parts, his forehead and throat bright chestnut, pinky white under parts, and a forked tail.

THE TOMTIT.

THE gay little Mr. Tomtit is one of the most amusing of all our birds. He is really most amusing and comic. He is an acrobat, a tumbler and a most

MR. AND MRS. G. L. TOMTIT.

clever gymnast; and he has such a funny little laugh, quite too funny for words; so funny, in fact, that when I feel sad, I go out into the garden to hear him laugh and play, and I am happy again at once.

He is very sharp and jerky in his movements, hopping here and hopping there. Well, you just go and watch him as he runs up and down the apple-tree branches hunting the little insects !

Mr. Gay Little Tomtit is another of the perching birds, of the family PARIDÆ, and his scientific or real name is PARUS CŒRULEUS.

When we call him Tomtit we are wrong, for he is really BLUE TIT, on account of his general colour, which is, of course, blue.

These are his colours. His forehead is white, the top of his head and neck are bright blue, and he wears such a beautiful blue collar. His little wings are blue, so is his tail. His breast and under parts are yellow, and his throat is black.

Though we should really call him BLUE TIT, we will still call him TOM TIT, because it sounds so much nicer, and more funny.

Mr. and Mrs. Gay Little Tomtit make their nests in holes in trees, sometimes in a hole in the ground or in a wall, where Mrs. G. L. Tomtit lays from ten to twelve tiny little eggs of white, spotted all over with light red.

When the young ones are hatched you see their father and mother at their most amusing antics. They hop and skip from twig to twig, from bud to bud, picking out all the little insects and grubs Farmer Blenkinsop calls "nasty". These little insects and grubs they take to feed their little children.

They do the horizontal bar and trapeze acts on the little twigs, in order to get at the buds which have insects on them, and in this way saving many apples and pears and plums.

I do not think they do one halfpenny worth of harm all the year round.

To watch them carefully search every bud and crack and crevice in the tree will give you some idea of the good they do, and while they do it they call to each other with that funny little laugh of theirs.

Many of the sisters and brothers and children of Mr. Gay Little Tomtit leave us in the cold weather, though they leave many behind; and as there are but few grubs and insects for the poor little birds to eat during the winter, you can help to keep them from starving in this way. Go to mother and say, "Please, mother dear, the poor Mr. Gay Little Tomtit is so very hungry, and I want to give him his breakfast, dinner and tea while the cold weather lasts; so please give me a lump of suet to put in a little string net-bag that sister Alice will make". Then mother will give it to you, and a kiss at the same time, for she is always glad that children think of poor little birds and animals when the cold weather comes.

Then go to sister Alice and tell her what you are going to do, and she will make a little string net-bag for you in a very little time. Put the suet in the

bag and hang it up just outside the window where you can see it while you are having your breakfast, and you will see Mr. and Mrs. Gay Little Tomtit fly on to it, peck a little bit, then another peck, and another, wondering all the time where is the good little boy who gave them such a nice breakfast. Then if Mr. G. L. Tomtit happens to look in at the window and catch sight of you, he will bob down his head, cock up his tail, wink his eye, and laugh out his thanks to you, as much as to say, "Thank you very much, indeed, for my breakfast! I shall come here for my dinner and tea every day until it is all gone, and then I hope you will give me some more."

He likes cocoanut very much when it is cut in halves, and hung up in the tree outside the window.

No one hurts Mr. G. L. Tomtit except the bad boy with the catapult; and when you grow bigger and see a boy taking aim at any poor little harmless bird you will take his catapult away from him and break it. I have done that many times.

THE MOUSE.

CREAK! creak! creak!—a scamper and a squeak behind the wainscot—and you may be sure a Mr. Mouse is somewhere about who has trodden on the tail of another one.

Mr. Mouse belongs to the MURIDÆ family, so does his big cousin, Mr. Rat, of whom I shall pre-

sently tell you. Mr. Mouse's scientific or real name is Mus Musculus.

He is a very very naughty little animal, though he is so pretty. I want you to know and see that he is really pretty and amusing, because ladies and little girls are so much afraid of him, and I think they would rather meet Mr. Lion in his own home than little Mr. Mouse in a drawing-room. I have often

tried to think out the reason, and have as often failed. I wish you would try and find out and let me know.

If they only knew that Mr. Mouse is thousands of times more afraid of them, they might perhaps like him a little better than they do. But I think, after all, that pigs will fly long before ladies and girls will like Mr. Mouse.

Are you afraid of the Mr. Mouse you see in this picture? No, of course not! Look at his twinkling

little black eye, his pretty little sharp nose, his long whiskers—(father's whiskers are not at all like his, are they ?). His little feet are more like little hands, only of course they have little claws on the little fingers.

He is covered all over with a very soft fur of a beautiful brown-grey colour, lighter underneath, and his tail is very long and nearly hairless. The hair on his tail seems to be in rings.

He has four teeth called incisor teeth, two on the upper jaw and two on the lower jaw, and they enable him to bite through floor-boards, partitions, wainscotting, plaster, or even your finger if you picked him up carelessly.

Mr. Mouse once bit my finger when I was a little boy, and I have not quite forgotten it, his teeth were so sharp ! I caught him in my bedroom by throwing my knickers at him as he sat in a corner, and I put my hand under them and caught Mr. Mouse—and Mr. Mouse caught me ; but I did not let go, nor did Mr. Mouse, so I called Tabby Cat, . . . and Mr. Mouse vanished down the "Red Lane" in Tabby Cat Land. Mr. Mouse's brothers and sisters are found in all parts of the world, and they are just as naughty there as they are here at home; in fact they are so naughty that they have to be caught and given to Tabby Cat.

Mr. Mouse's ears are large, and just like a particular kind of small sea-shell you may find on the

shore, and he can hear the slightest sound you make. Though if he happens to creep out of the little hole in the corner of the room and run along the floor, close to the wainscotting, and you keep quite still, you may watch him for a long time.

Your mother does not like Mr. Mouse and his family at all, because they eat all the good things in the larder—sugar, butter, cheese, dripping, lard, bread, biscuits, cake, puddings, currants, raisins, preserve, almonds, nuts, in fact everything good.

So mother sets little wooden traps like cages, and baits them with toasted cheese, because toasted cheese smells so strong and nice, and Mr. Mouse comes out, finds out where the delicious smell comes from, pops in at the open door of the trap, bites the cheese which hangs on the trigger hook, and—SNAP! Mr. Mouse is caught, and Tabby Cat goes to sleep next morning with a smile on her face, and a comfortable feeling inside.

Mr. Mouse is very fond of music. Two or three of his family came out sometimes to listen to my father playing his fiddle in the evening. They listened very attentively while he was playing, and did not interrupt by squeaking, as some human beings do when they go to concerts. Mr. Mouse can sing too, though I have never heard him. I should so like to—would you?

I forgot to tell you that Mr. Mouse is very fond of bird seed, and I have seen, in a very large cage sort

of thing called an aviary, ten or twelve of Mr. Mouse's relations eating the bird seed. I have also seen Mr. Mouse run down the little brass chain which held up a canary bird's cage in my father's breakfast room, and get in through the wires to eat the seed. My poor little canary was not very well, and I was afraid Mr. Mouse might kill him; so I shot him and several of his family with an air-gun as they crept along the curtain pole towards the chain of the cage. I was very sorry to be obliged to do it; but I was more fond of my birds than of Mr. Mouse. Mr. Mouse is very inquisitive, and his inquisitiveness gets him into trouble very often. He gets into trouble in the little story nurse can tell you. Ask her, and she will say :—

Dickory ! Dickory ! Dock !
The Mouse ran up the Clock,
The Clock fell down
On Mouse's crown,
Dickory ! Dickory ! Dock !

MR. RAT.

Mr. Rat is a big cousin of Mr. Mouse, and much more naughty. He belongs to the same family, only his name is Mus Decumanus.

The Mr. Rat we have with us now is Mr. Brown Rat, and he came from the East, in ships. All ships have rats on board.

He first came to England early in the eighteenth century. Before he came we had Mr. Black Rat, who is much smaller, and more elegant and pretty than Mr. Brown Rat, but not quite so strong.

When, however, the Mr. Brown Rats landed on our shores, they fought the Mr. Black Rats, and

Mr. Rat gnaws a Chop-bone.

killed and drove them all away, and took their places in our warehouses, farm buildings and houses.

Mr. Rat's body is about eight or nine inches long, and his length including his tail is about sixteen or eighteen inches.

Here is a picture of him, and really, though he is

so thoroughly wicked, he is rather pretty to look at. Rats do not like living alone, but like lots of companions, and if you hear a rat squeak, you may be perfectly certain that his brothers and sisters are not far away.

He lives under the floors of houses, in barns and farm buildings, big warehouses, factories, cellars, big sewers and drains, and at night he comes out with many relations, hunting for food.

His teeth are just like those of his cousin Mr. Mouse, only much bigger, and he can gnaw his way by means of these strong teeth through floors, thick beams, joists and plaster. When once he has quite made up his mind to come and live with you, he is most difficult to get rid of. He is so cunning that he soon knows the traps that are set for him, and he will not go into them, no matter what nice things you bait them with.

A little while ago Mr. Rat thought my house was a rather nice one, and he made up his mind to come and live with me, and you may be sure that he did not ring my front door bell as you would have done. Instead of that, he actually gnawed a hole through the joints of the drain outside the side door, and then under the doorstep, and then he found himself under the kitchen floor.

Sarah, the cook, was the first to find out that Mr. Rat was in the house, for when she went into the kitchen one morning to get our breakfast, she found

a large piece of bacon against a hole in the corner, and she wondered how it got there!

While she was looking and wondering, and saying "Well, I never," Mary, the housemaid, came in and told Sarah that there were some cutlet bones in the passage, and that she could not find the butter, and "What the Missus will say, I don't know!" she said.

Cook was not a bit afraid, and did not tell us just then, but got breakfast cooked, and we sat down to eat it. But when I was just putting my fork to my mouth, cook came in and said, "Please, sir, there is a big rat in the kitching, and that there Mary is a-standing on her *cheer*, as a-feard as ever was!"

I went into the kitchen and found Mr. Rat under the dresser, . . . and the boot-boy afterwards buried him under one of the gooseberry bushes.

Next morning cook found that Mr. Rat's relations had not cared anything about him; in fact they had forgotten all about him, and had gnawed an uncooked leg of mutton, more butter, some dried fish, fruit and lots of other things.

Do you think I was going to put up with that kind of behaviour? No! certainly not!

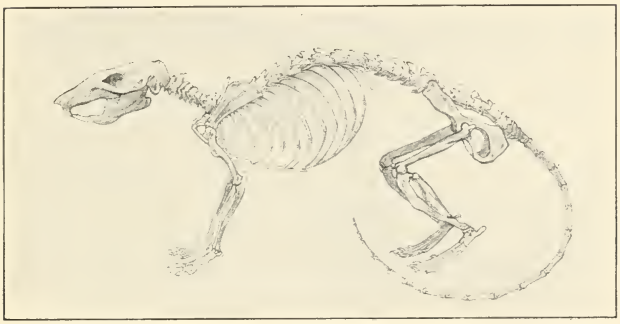
I got Mr. Ratcatcher to come with his ferrets, which he put down the holes and under the floor-boards, and the ferrets soon drove Mr. Rat and his relations away.

Mr. Rat does not like Mr. Ferret, but Mr. Ferret

loves Mr. Rat so much that he would eat him for breakfast, dinner, tea and supper.

Mr. Rat is a good fighter, and if he is driven into a corner, he will even try to fight a man, and it is so funny to see him sitting up on his hind-quarters, snarling and grunting, and striking out with his fore-feet.

In the country rats live mostly in farms and farm



MR. RAT'S OWN BONES.

buildings. He likes to live in hay and corn ricks. You see, when he is in a corn-rick he has only to turn his head to get a good dinner. Farmer Blenkinsop very soon gets tired of Mr. Rat's wickedness, and he tells his son Jim to ask his friends to have an exciting afternoon's sport with Mr. Rat's relations.

So on a bright afternoon in the autumn, Jim and Tom, and Dick, and Arthur, and John, and Harry,

Alfred and Will came into the rickyard, some with sticks and some with guns, dogs and ferrets.

Arthur and John take the ferrets from the little bags, beautiful little cream-coloured animals, with pink eyes, and put them into the rat holes at the bottom of the rick. The rats run out of the holes for fear of the ferrets, and are killed with sticks and guns, and by the dogs.

Mr. Rat will never leave us; he loves us too much, and he does not care how we hate him. He will still stay with us until perhaps some other animal comes along to fight him, and drive him away, as he did his cousin Mr. Black Rat.

Tabby Cat very often kills Mr. Rat, but Mr. Terrier Dog is the gentleman he is most afraid of.

Mr. Rat steals hens' eggs and carries them long distances without breaking them.

He is also very fond of young chickens, and of course when he eats the young chicks, you have not so many "merry thoughts" to pull with mother.

THE BEE.

I DO not like to say that the Bee is the most hard-working and clever insect in the world, because there are others. There is the Ant, for instance, about whom I shall tell you presently.

The bees are, however, very industrious. There are many kinds of bees, but the bee I shall try to tell you about is the Honey Bee.

Here is a little scene I once saw in the country. Those little dome-like things made of straw are bee-hives, or the houses in which the bees live and work and make that most delicious syrup called honey.

Honey Bees on Pear Blossom.

Do you like honey? Yes? I thought you would not say No!

Now, before I tell you how honey is made, I must tell you something about the bees themselves.

All bees belong to the family Apidæ, of the order

HYMENOPTERA. Other members of the family are Wasps and Ants, and are all hard-working little insects.

In a bee-hive there are three classes of bees—the Queen bees, Worker bees, and Drones.

The Queen bee lays all the eggs from which other bees come.

The Drones are the Mr. Bees, and the Workers are Mrs. Bees who can never be Queens.

To begin with, when the Queen bee takes the other bees, Workers and Drones, into a new home, the Workers set to work to make the bees-wax to make the "comb". This they do by sucking up the juices out of the many flowers in the gardens and fields, and digesting them, and when they have eaten a tremendous lot of this food they sit inside the hive perfectly still. Presently from under the segments or bands of armour round their bodies, come little scales of this bees-wax, and these are taken by other of the Workers and used to make the comb with its cells, in which they store the pollen and honey, and bring up the young bees.

This comb they build in layers, one layer above another, leaving just sufficient room for the Workers to walk in between, when they go to fill the honey or pollen cells, or to attend to the young larvæ. You may see several layers of comb in some hives.

While the little Worker bees have been making the cells, the Queen has been taking occasional little flights enjoying herself in the sunshine; but when

she knows that the cells are ready for her she begins her only work, that of laying eggs.

She lays an egg in each cell. In some cells she lays eggs which will become Worker bees, in others eggs which will become Drones, and in a few others she lays eggs which will become Queens.

She never once makes a mistake, which is most wonderful.

The Drones are lazy bees, and do no work at all, but stand idly about, eating all they can while the little Workers are making the cells and collecting food; so when the Queen is ready to begin her work of laying, the Workers pounce on the Drones and kill them all, every one, and throw them out of the hive! I think they are quite right in doing so, for if the Drones will not work, why should they eat—eh?

Now, while the Queen is busy laying her eggs, the Workers are busy collecting honey and bee-bread, and filling the cells with them.

Watch a bee at work in the garden! She flies from flower to flower, and then away to the hive, then back again; to and fro all day long, from the early morning before you are up, till the evening, after you are in your little beds!

She sucks up the sweet juices from the flowers by means of a long tube from her mouth, called a proboscis, and this juice goes into one of her stomachs; for she has two stomachs, one with which to digest her own food, and the other into which the flower

juice is taken. When this particular stomach is filled, she flies back to the hive and throws the flower juice back again into the cells, and this juice becomes the honey which you like so much. So she goes on, on, day after day, day after day, working, working.

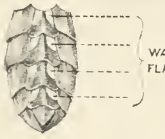
Have you ever touched the inside of a flower and found your finger-tip covered with yellow powder? Well, this the bees also collect, and in this way:—

They creep into the flowers, and with brush-like arrangements on their legs gather the pollen, as the yellow powder is called, and knead it into little balls, which they place in hollows in the insides of their thighs, called baskets. These little balls they carry to the hive, and with them fill the cells prepared for them. This is then called bee-bread, and is used to feed the larvæ.

When they are in a hurry, which sometimes they are, because the store of bee-bread is getting low, the bees actually roll themselves in the flowers in order to collect more pollen at the one time.

When the Queen bee has laid all the eggs she wants to, each in its proper cell, the Workers watch the cells very carefully, and work hard, laying up stores of bee-bread and honey.

Presently the eggs hatch, and each little larva lies at the bottom of its cell; then the Workers are more busy than ever, feeding and watching the larvæ as they grow bigger and bigger. In three or four days after the eggs are laid they are hatched. In

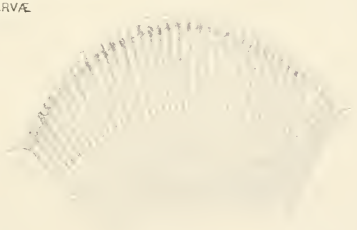


UNDERSIDE OF ABDOMEN
OF BEE SHEWING FLAKES
OF WAX
MUCH MAGNIFIED.

THE BEES EGG.
(MUCH MAGNIFIED)

LARVÆ
(ENLARGED)

PUPA.
(ENLARGED)



EYE OF BEE CUT IN TWO
(GREATLY ENLARGED)

another five or six days they are full-grown larvæ and are no longer fed, but are closed up in their cells by the Workers to grow into pupæ. This part of their life takes four or five days longer. The pupæ are perfectly white.

In a week more the perfect insects burst from their closed-up cells. So that from the time the eggs are laid by the Queen to the bursting out of the perfect bees, only twenty-one days pass. When the insects burst from their cells the Workers lick them all over to make them clean. You see they cannot get soap and water like nurse does, so they have to lick them clean, and when they have washed them, they give them something to eat.

The royal cells are most carefully watched, because the old Queen would kill the pupæ of the young Queens by stinging them through the top covering of their cells if she could get at them, but from this she is prevented by the Workers, who push and hustle her back into her own room, and keep her there by placing sentinels at the entrance.

When the young Queens are nearly ready to come out of their cells, the Workers gnaw the top covering until it is very thin, so that the young Queens will not have so much trouble in getting out, for of course it is not at all the proper thing for Queens to have to work hard.

While the old Queen is waiting to take a sufficient number of young bees, Drones and Workers, she is

kept a close prisoner, and the young Queens, who are quite ready to emerge from their cells, are not allowed to do so for fear of the old Queen. The Workers make the top coverings of the cells much thicker, leaving little holes in the tops through which they feed the young princesses.

Then when the old Queen is quite ready to take away an army of bees, called a swarm, away she goes, and the young Queens are let out, one by one, each to take away a swarm with her. But while the poor young things are waiting in their cramped rooms they do so cry and beg and pray of the Workers to let them out. They do really!

When the swarming season is past, and there are two young Queens left in the cells in the hive, they are allowed to come out together to fight until one kills the other!

There must not be more than one Queen in a hive, any more than there should be more than one Queen in a kingdom!

The Queen who wins the fight then stings all the other royal cells to kill the young Queens that may be inside them, so that she is then the one and only Queen, and next year does exactly the same work as the old Queen did.

I daresay you will wonder how it is that the Worker bees manage to do their work in such a dark place as a hive. Think of all the beautiful cells they make in such perfect order.

They cannot see very much at any time, and all their work is done with the aid of two little feelers, which stand out of their heads, called antennæ. With these they touch this and that, and feel this and that, and find out where to put this piece of wax, or that piece of wax, or where to put the honey or the bee-bread; they know where the Queen is, and how to wait upon her, and how to feed her; where the Drone cells are, where the Worker cells are, where the royal cells are, and all this with these wonderful antennæ.

HEAD OF BEE (ENLARGED) SHOWING PROBOSCIS.

I think bees are more clever than we are at building. We have to use rules, measures, spirit levels, plumb-bobs, straight edges, trowels, shovels, spades, hammers, saws, chisels, planes, nails and screws; they have only their mouths and legs to work with, and of course no tools at all. Is it not wonderful?

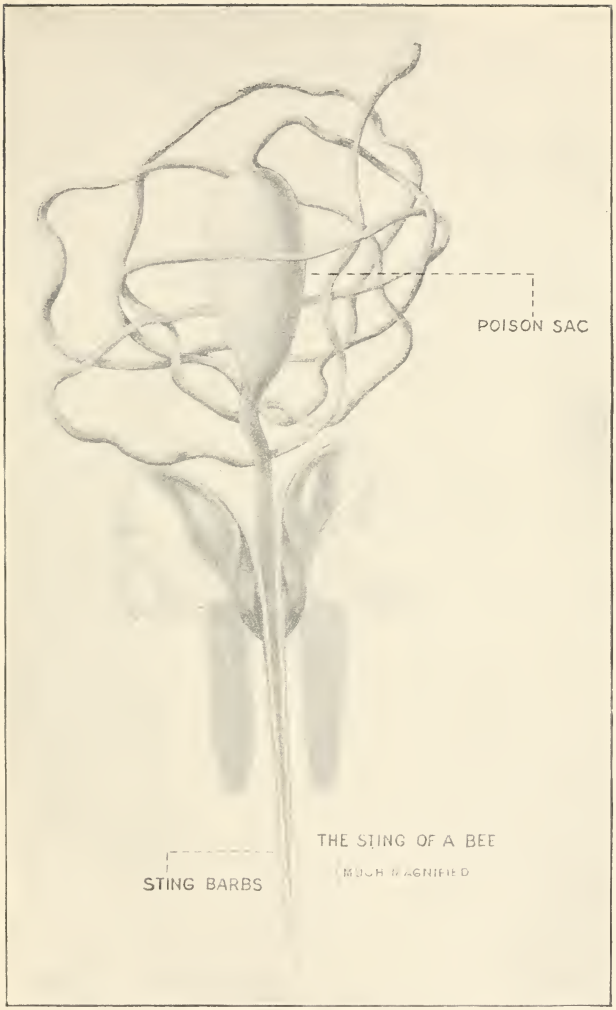
If bees had no antennæ you would have no honey, and the bees could not live, and if there were no bees the flowers would not be so good or plentiful, neither would there be so much fruit, because while they are working from flower to flower, plant to plant, tree to tree, they are continually taking the

pollen with them, as I have just told you, and some of this is dropped by them into each flower they visit. This causes the fruit to form, and the seed pods and cases. So you see that bees are not only useful in making honey for you to eat with your bread and butter, but they help the gardeners to make your gardens more beautiful, and grow lots of nice apples, and pears, and plums, and damsons, and peaches, and apricots, and nectarines, and quinces, and gooseberries, and currants; and I am afraid that the innocent little bees help little boys and girls to get little pains behind their belts through eating too much fruit when father is not looking! Am I right?

I must not forget to tell you, if you have not already found out, that the little bee has a very sharp weapon with which she defends herself when she is attacked.

It is called a sting, and is placed at the very end of her body in a sheath just like a sword. When she is working, and not annoyed by any one, you cannot see it because it is drawn up inside her body. But if she is annoyed she shoots it out most angrily. The most curious fact is that when a bee stings you she leaves her sting-sword behind in your hand, or wherever else she happened to sting you.

We know the cause of her sting being left behind, but we do not know why it should be so. The worst of it is, the poor bee dies after it has stung a human being, for after stinging it tries to pull its sting out



Sting of Bee (much enlarged).

again and is unable to do so, because the sting has barbs, or sharp points, pointing backwards which hold fast in the flesh; so, of course, when the bee pulls hard to withdraw her sting, she pulls so hard that the sting is torn from her body with part of her inside, and then the poor little lady must die!

People who keep bees for the sake of the delicious honey they make, become so accustomed to being stung by them that they do not mind in the least. They are what doctors call inoculated, which is something like being vaccinated, only very different really.

You are not inoculated, neither am I, so if we were to play with bees and be stung, we should be all lumps and bumps, so much so that our dear mothers would not know us! Would they?

The inside of a bee-hive is very warm indeed, and when you consider that there are from 20,000 to 40,000 bees in one hive you can quite understand how hot it must be; and of course it is necessary to ventilate it, for bees, like human beings, cannot live properly in impure air; so in order to ventilate the hive, a number of Workers fasten themselves to the floor of the hive by holding very tightly with the little claws on their feet, and imitate the action of flying, which of course causes a great draught. When one batch of Workers gets tired, another batch takes its place, and so on all day long. This way of ventilation causes the continual humming

you always hear inside the hive, and it sounds just like a schoolroom full of children—at least *I* think it does!

Bees love the bright hot days in summer, and on those days they are very active and quick; but on cold days they become dull and tired, and if it is very cold they become so numb that they cannot fly, and then, poor little things, they cannot get back to the hive.

Humble Bee's Wing.

Honey Bee's Wing.

When a swarm of bees goes into a new hive the first thing they do is to clean it well out. So you see they don't like dirt one little bit; and while some are cleaning it, others are flying about finding cement for stopping up all the little cracks and chinks. This cement is really a kind of resin or sticky stuff, and is used while it is soft. If there is anything in the hive which they cannot take out they cover it with this cement stuff.

Now don't you think that bees are most wonderful little insects?

There is a little piece of poetry about them. The first verse is something like this :—

How doth the busy little bee
Improve each shining hour ?
She gathers honey all the day
From every pretty flower.

I forget the rest ; but one day many years ago, when I was a very little boy, a man told me that that verse was not correct, and said that this one was the correct one :—

How doth the busy little bee
Delight to bark and bite ?
She gathers honey all the day
And eats it up at night !

Of course it is really very silly indeed, and I thought so then, for I knew that bees could not bark and bite, but only sting, and I almost wished then that one of the bees had stung him for saying such horrid things about them.

THE ANT.

One of the most interesting and, at the same time, amusing insects is the Ant. She is exceedingly clever ; so clever is she that you are astonished, more than astonished, when you see how very very tiny she is. Though, of course, she is much smaller than the Bee, she is just as clever.

The ant belongs to the family Formicidæ, and has cousins in all parts of the world.

She can build, she can nurse, she knows all about "cattle-breeding and farming," she can fight very well; in fact, I don't think there is very much she does not know.

We find them in the fields, in our gardens, in our paths and in our houses sometimes, and although we do not like them for getting into our houses, we must not be cross with them, for they do very little harm and appear so knowing.

An ant's nest is one of the most wonderful things you could see.

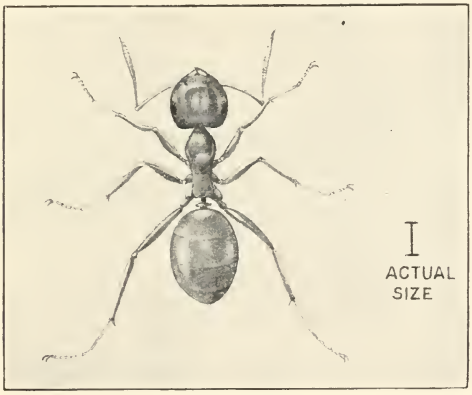
There are tunnels and passages, corridors, rooms, nurseries, front doors, back doors and side doors.

Each nest is a little kingdom in itself, and in it are queens, soldier ants, builder ants, nurse ants and porter ants; and they all work very hard indeed to keep their little kingdom in good order.

Now, in one of the cracks in the stone-flags outside the front door you may, one fine morning, see a little heap of grains of earth with a little hole somewhere in it, and many little ants running about here and there. You did not see that little heap before you went to bed last night because it was not there at the time you went to bed, for the ants had not begun the work of making their little kingdom—digging tunnels, galleries and corridors, passages and nurseries, "cowsheds" and barracks, front doors and side doors and back doors. All this, of course, cannot be done in one night, but, as you can see, a great deal

was done towards it during the night. As the ancient folk said, "Rome was not built in a day," and in its way Ant City is just as beautiful as the City of Rome.

If you could only make yourself as small as the ant, like the princes and people in the dear old Fairy Tales, and walk in at the ant's hall door, you would be surprised at his being so very clever as to



THE ANT.

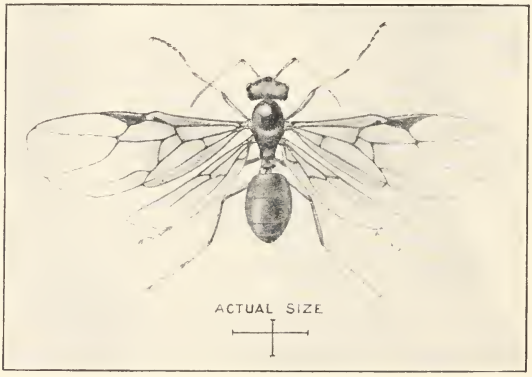
make such a beautiful town. It *is* a kind of town, you know, and built all underground.

If you take a flower-pot and place it mouth downwards over this little mound of earth crumbs, the little ants will inside it build their little kingdom with its little streets, and stairways, and lanes, and storehouses, and hospitals, and nursing homes.

Here is a portrait of an ant. In it you may see

how sharp and how very clever he looks. His head is quite large and appears to be full of very excellent brains; indeed it must be, otherwise he would not be able to do the very clever work he does.

In the autumn you may see clouds of ants in the air not very far above the ground, for they belong to the order HYMENOPTERA, because they have wings,

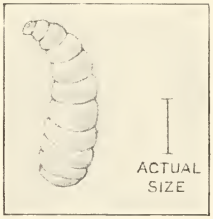


FLYING ANT.

though only for a very short time during their lives. Their flight is not a very good one, and their wings seem too small for their fat bodies, and instead of flying like other flies do, in this way ——— they fly like this ⁄ and not at all quickly. Consequently hundreds and hundreds are easily caught by Mr. and Mrs. Swift, Mr. and Mrs. Swallow, Mr. and Mrs. H. Martin, Mr. and Mrs. Flycatcher, and

many other birds. They fly about until they have found a place which they think will suit them, then they drop down to the ground, and then, of course, their wings are of no further use to them, so they bite them off; then they set to work to build their new kingdom, and they are not very long about it, for like their cousins, the bees, they belong to a very industrious family. When they have prepared rooms for the eggs, the queens lay the eggs in these rooms.

These eggs are most carefully watched and looked after by the nurse ants, whose business it is to lick them all over every day; this helps the hatching. Soon the little larvæ are hatched, and then the nurses are more careful in their attention than ever; they feed them with all sorts of nice things, and wash them, and take them for little outings in the town; but I do not think that the nurses use mail-carts and perambulators, though of course the soldiers are there to take care of them.



Ant Larva.

So the larvæ grow and grow until they are ready to become pupæ, and when this happens the nurses place them each in its proper room. Then the pupæ are watched, also very tenderly; the nurses tapping them every now and then with their antennæ to see whether it is time for them to awake from their long sleep and burst from the pupa cases.

When the perfect ant bursts from its pupa case it is washed all over by the nurses licking it, and fed and cared for until it can be trusted to run about by itself.

Ants feed on the sweet honey-dew which is dropped by the aphides, or green fly as they are called in the country, on to the leaves of rose trees and other plants. Not only do they take it from the leaves, but they actually tickle the aphides with their antennæ to make them squeeze little drops of honey-dew through the two little tubes called cornicles, which stand out of the hind parts of their bodies. I daresay you have noticed that some of the rose leaves are all shiny and sticky; if you have you must know that this stickyness is caused by the aphides letting fall this honey-dew on them. I myself like the flavour of honey-dew; it is very nice indeed, and if you would like to taste it, you may, for it will not do you the least harm.

Of course the ants do not quite like running all up the rose trees every time they want a little honey-dew to drink, so they just catch these aphides and keep them in stables in the nest, just as Farmer Blenkinsop keeps his cows when milking-time comes round.

Beside honey-dew, ants eat other insects, alive or dead, dead birds and other matter.

If you watch them you will see for yourself how very clever and knowing they are. Take a few grains

of sugar and put them down a few inches from the nest, and presently you will see an ant run up to them, run back, and meeting another ant, tell him all about the delicious food some kind little person has put down for them to eat. They then both go and have a look at the sugar, and one runs away back to the nest to tell the porters to come and carry away the nice morsels to the storehouses. The porters are not long in doing so, I can assure you!

Ants are very fond of fighting, and if any ant from a strange nest happens to cross the path leading to another nest, the ants will pounce upon him, fight and kill him, take him to their nest and actually eat him.

Some ants make real war on others, and march along in thousands to another nest, fight its ant people, and, stealing the eggs, larvæ and pupæ, carry them away to their nest and bring them up as slaves.

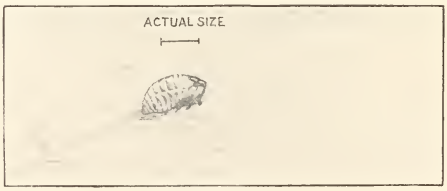
If ever you find a dead bird, and feel you would like to know how its body is built up and the bones put together, just you put it on an ant's nest, cover it with a flower-pot, and wait a few days; then when you take the flower-pot up you will see a few feathers, and in amongst the feathers a more or less perfect skeleton of the bird. I have done this several times. You see, the ants eat all the flesh, leaving only the bones, which are too hard for their little mandibles or jaws.

If you find an ant's nest anywhere in the flag-

stones outside the front door or back door, don't let Sally, the housemaid, destroy it, which she will most certainly do if you tell her where it is, by pouring a kettle of boiling water down the crack, and then the poor little ants will all be boiled to death, and that would be a shame, wouldn't it? And what is the use of boiling them, anyway? They are not at all good to eat, and they do not look half so pretty when they are dead as when they are alive and kicking in the full enjoyment of their short little lives.

THE LADYBIRD.

You must have seen the little Ladybird. Of course you have. You *must* love little Ladybird, because she is so gentle and quiet. She looks like a little



Ladybird Pupa.

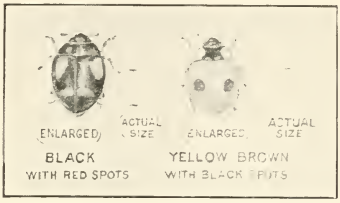
jewel as she sits on the leaves of the trees, her little hard shiny back coloured scarlet and black. Look! here she is.

She runs over and under and round about the leaves and stems of the trees, hunting the aphides.

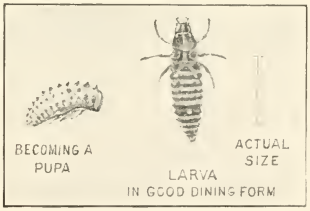
"SALLY WILL POUR BOILING WATER ON THEM."

Ladybird is loved by us all, and is never willingly hurt, because she does such a great deal of good in the garden; indeed, I don't know what rose-growers would do without her help.

She belongs to the beetle order of insects, COLEOPTERA, and her name is COCCINELLA.

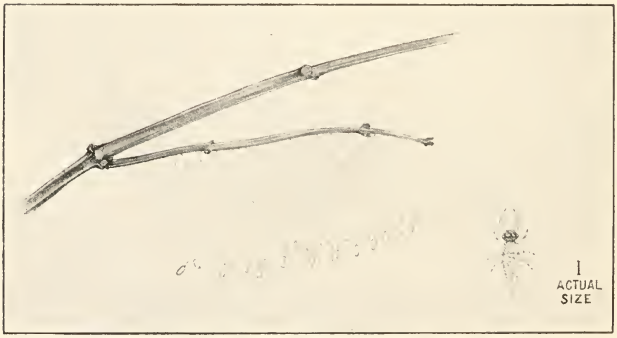


There are several varieties of the ladybird in England, and the one, I think, that we see most of is the two-spotted one. You may see them in all sorts of places during the summer and autumn, grouped together in corners of windows and frames, corners of ceilings, cracks and crannies; in fact, sometimes they are rather in the way, and we often kill them without knowing that we do so. I do think that it is silly of them to get in our way so much—don't you? But, poor little things, I suppose they love us so much that they want to be with us wherever we go, for you find them on your collars, sleeves, coats, tablecloths, and they even run races round your tea plates. I don't know whether they imagine that the tea plate is like



a bicycle track; anyway they run round and round like mad.

You may see some day while you are playing in the garden a funny-looking little black caterpillar, a little more than half an inch long. This is the larva of the ladybird, and it is a sort of blue-black grey colour with a few yellow and red spots on it. The best place in which to find it is on the rose leaves,

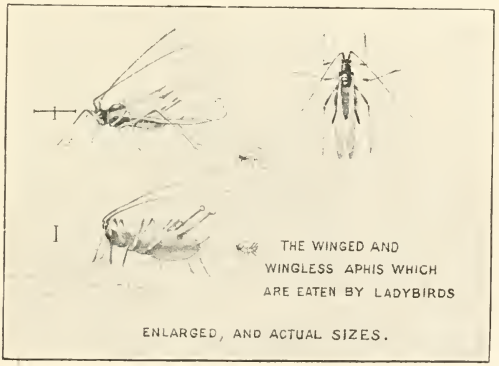


Eggs and Larva of Lacewing Fly (enlarged).

because you see the food of the ladybird larva consists of all kinds of nasty little insects which eat our nice plants and flowers, and stop their growing so well and giving us such nice flowers to put on our tables. The ladybird larvæ have enemies in the shape of the larvæ of the lacewing fly, for while the ladybird larvæ are hunting the aphides, they themselves are being hunted by the lacewing larvæ.

In the picture you can see the eggs of the lace-wing fly suspended, each on its own silky thread, from a piece of dried twig. The ladybird larvæ are very fond of aphides, and they eat, and eat, and eat these aphides until they can scarcely crawl along, they have eaten so many.

When the larvæ have eaten sufficient, and begin to get tired of eating heartily for five or six weeks, they



think it is time to go to sleep for a few days; so they become pupæ, and fasten themselves to the under-sides of the leaves by their tail ends, cast their skins, and the pupæ remain attached to the leaves. In seven or eight days the pupæ cases burst, and the perfect Misters and Mistresses Ladybird pop out to continue the war upon the aphides.

The time occupied in all this changing of life is less than two months. Just fancy that! only nearly

two months! And you could not crawl on the floor when you were two months old! and yet ladybirds are born and die, born and die hundreds and hundreds of times before you are full-grown men and women. Just think of that! They are quite grown up to men ladybirds and women ladybirds in less than sixty days!

My mother used to sing to me a little song about the ladybird, and it runs like this :—

Ladybird, Ladybird,
Fly away home,
Your house is on fire,
Your children alone.

All but one,
And her name is Ann,
And she crept
Under the pudding pan.

And I think I used to cry when I thought of the poor little kiddy ladybirds in a lonely nest, and no mother to save them from the terrible fire, and when I thought of poor Mrs. Ladybird's sorrow when she arrived home to find her poor house and children all burnt. I did really.

I think that all these dear little nursery rhymes and verses make little boys and girls love all our little animals and insects. I know they made me love them, and I hope you will follow my example.

"Ladybird, Ladybird, fly away home!"

THE STAG BEETLE.

THE picture of the Stag Beetle you see here is the portrait of one I caught last year. Though he appears somewhat large, he is by no means as large as some you may one day see.

He is called Stag Beetle because his mandibles are very like the horns on a stag's head.

He belongs to the order COLEOPTERA, his name being LUCANUS CERVUS.

On summer evenings he flies about here and there, humming like a great top, and if you happen to be riding a bicycle rather quickly along the road be-

cause you will be late for supper, and Mr. Stag Beetle happens to be flying towards you, the meeting is not likely to be a very pleasant one for either of you, for his body is rather hard and will give you a nasty whack in the face, and the poor beetle will be very much shaken up and frightened.

He likes the neighbourhood of oak woods best, though he is to be found in the southern counties. He does not fly very fast, and walks slowly. I frequently, in the summer, find them under the trees at the back of my garden, strolling about amongst the leaves and stones.

Mrs. Stag Beetle (reduced).

Shall I tell you how I found the one in the picture?

One evening after tea last summer, a friend of mine took a few friends, including myself, for a long motor ride all through the beautiful country roads and lanes, through pine forests, across commons—oh! such a beautiful ride!—and after driving for nearly sixty miles we stopped at a jolly hotel for dinner.

This hotel had most beautiful grounds, including kitchen gardens, flower gardens, lawns, aviaries. You must go there some day when you are big enough.

Well, while we were sitting on the beautiful lawn,

talking and waiting to be called to our dinner—you see we had to wait because we were having all the vegetables straight out of the garden—I heard a loud humming noise close to me, and I knew at once it was a large beetle of some kind. Then I caught sight of it, and saw it was a beautiful male stag beetle, and I determined to catch him if I could. So I jumped up, and, as I had no butterfly net, I threw my cap at him, but missed, the cap lodging in a large yew tree. Snatching a cap from the head of one of my friends, I darted across the lawn after the beetle.

Mrs. Stag Beetle's Fore-leg (enlarged).

My friends thought I had suddenly gone mad, as I daresay you would had you been there. In my excitement and haste to catch my beetle, keeping my eyes fixed on him all the time, I did not see a very large and heavy ornamental flower vase right in my way, and I went smack into it. Over we went, vase and I, but just as I crashed into the vase I threw the cap once more at the beetle. I picked myself up and saw, in the doorway, the proprietor of the hotel look-

ing with wide-staring eyes and open mouth at me, wondering, I have no doubt, whether I had taken leave of my senses. I apologised to him for knocking over his flower vase, and went back to my friends, who were cackling with laughter at me all this time just like a lot of sillies! In the cap, however, I found the stag beetle, so I didn't so much mind my poor barked shins. They call me "Staggy" now. Don't you think that it is rude of them?

THE SQUIRREL.

Mr. Chippy Squirrel belongs to the rodents. His name is Sciurus Vulgaris. He is found all over the world, so we must not think that our England is the only country in which he lives.

Mr. Chippy Squirrel is a most active little chap, and never seems to be still for a minute. He can climb up the tallest and biggest tree just as easily as you can walk up and down stairs, and he travels with flying leaps from tree to tree and never once makes a mistake in the distance.

He has a long and bushy tail which he holds curved over his back when he is sitting down. In colour he is red-brown on the upper parts and white underneath, and all of his great bushy tail is red-brown.

Mr. Chippy Squirrel is about sixteen inches long,

including, of course, his tail, which in itself measures nearly eight inches, nearly half his whole length.

"CHIPPY."

His food is hazel nuts, beech nuts, and the bark, shoots and buds of trees. The Squire's head gardener shoots all the little squirrels he can, for he

says that they destroy so much fruit. I, however, will not say that they do. Do you know what "Old Spuds," as they call the head gardener, does with Mr. Chippy when he shoots him? No? I thought not, so I will tell you—HE EATS HIM!!! And, really, he says that chippy meat is very nice to eat! So when I find that Chippy does me any harm I shall try a little chippy meat nicely roasted. I am afraid, though, that I shall have to wait a long time.

Chippy runs about and feeds during the day, and sleeps at night.

I should like you to see him feeding. He looks so pretty sitting up on his haunches with his long bushy tail curled right over his back, nibbling away happily at a hazel nut which he has stolen from the Squire's bushes. You see he takes the entire shell off by drilling a hole and then splitting the shell before he attempts to eat it, and whenever you find nutshells under the trees in the park you may safely say to yourself, "Chippy has had his breakfast here!" I wonder whether he says "Bother!" when he gets an empty nut or a bad nut?

Mr. and Mrs. Chippy Squirrel make such a nice little nest of moss and leaves and grasses all plaited and laced together. This nest they build in holes in tree trunks, or sometimes in the fork of a bough, and when it is built in this place you will have to use your eyes a great deal as you stand on the ground before you can find it. Of course if you

were up in the tree you could find it much more easily.

In this nest the three or four little kiddie chippies are born, in the month of June, and are nursed by Mother Chippy until their teeth are strong enough to bite nuts and things; then next spring, of course, they have to leave the nest and go out into the world to fight their own battles.

Chippy lays up stores of food for the winter, but he does not put it all in one larder, I suppose because he thinks that if some thieving animal finds one larderful, there will still be others left to him.

I have another confession to make! Dear me! what a lot of confessions! When I was a boy I was very fond of shooting at Chippy with my catapult, and though I only killed one or two, I am sorry; but I am afraid I frightened a great many more. But really it was very funny to see them darting here and there, now on this side of the tree trunk, now on that, all the time making a funny little grunting noise.

If you ask Velveteens very nicely he may get you two young chippies, and you can keep them in a nice big cage. You may easily tame them, and they will become very nice little pets; and if you are very kind to them they will soon learn to love you just like Old Spot, the terrier dog, loves father.

MR. HEDGEHOG.

I CALL him "Prickles," and by that you will know that there is something sharp about him; but when you see him for the first time you will not wonder at all why I call him Prickles, for you will see at once that his back and sides are covered with very sharp spines, and that he would be an uncomfortable handful to nurse.

Prickles is known as "Urchin," but most people know him as Hedgehog, because he lives in and about hedges, and is supposed to be like a pig in looks. I don't know in what way though, except that he has a funny little grunt.

He belongs to the order INSECTIVORES (insect eaters), family ERINACEUS, his own particular name being ERINACEUS EUROPÆUS.

Prickles looks like half a melon covered with hair and long thorns, with a sharp nose at one end, and with very short legs. It is rather a funny description, I know, but I think that you will know him after that description when you happen to see him.

The spines which he carries form a very effective kind of armour, a defence against any animal that might think he is good for dinner; and when he is frightened he is able to curl himself up into a ball, and then the spines or prickles stand straight out all over him.

If you were near him when some animal tried to make a meal of him, I think you would hear him chuckling to himself to think how awfully silly and stupid it is for any animal to think of such a thing. Old Spot, the terrier dog, is very brave and plucky, I know, but he knows that it is no use his trying to make Prickles uncurl himself; because once when he was a puppy he did try, and for his pains his poor little black nose was prickled all over, and it hurt him very much; so he now trots past with his nose in the air.

Prickles eats worms, snails, slugs, eggs, snakes and lizards, and rats, and mice; and he likes them very much indeed. It is most funny to see him eating a worm. He chews it well on one side of his mouth and then on the other side, drawing it in gradually all the time, until you see the worm's tail disappear. He eats snakes in the same way. He is very fond of beetles and other insects, and now and then people keep him in their gardens to eat up worms, snails and beetles, and other insects, and in their houses to eat up cockroaches.

Prickles is very fond of birds' eggs, and because of this, Velveteens kills all he can of his relations, also because he likes the young birds just hatched.

In some parts of the country the farmers kill him because they say he sucks the cow's milk at night when they are lying out in the fields. This is of course all nonsense; Prickles does nothing of the kind.

Farmers say that he robs apple orchards by going under a tree and rolling amongst the fallen apples, causing them to stick to his spines, and that when he has, on his spines, collected as many apples as he can carry, away he goes to his den! Did you ever hear of such nonsense?

Why they should say this I have no idea, because Prickles is not a fruit-eater, and also I don't think that an apple would remain long on his back.

So I think you will be quite right in saying that he does not steal from orchards.

He lives in hedgerows and bushy places, such as copses, and seems to sleep during the day, coming out, as the evening comes on, to find food. Sometimes, however, he feeds out in the daytime, though he is nocturnal in his habits.

Mr. and Mrs. Prickles carefully build a nest of moss and leaves, and to keep the rain out they make a kind of roof, so you see they are clever at building; and in this nest are born four or five Pricklettes, quite blind and not able to roll themselves up. They are born in July or August, and sometimes as late in the year as September. Then their spines are quite soft, so they can easily be tackled by Spot, the terrier dog.

Prickles, like Chippy, sleeps during the winter, but does not lay up any store of food, and by the time spring comes round again, I should think he must be very hungry. *I* should be, I know, but then of

course we could not sleep so long as that; we should die! The worms and insects have to do their best to keep out of his way when he wakes, though his appetite is *always* very good indeed.

When I was a boy I had a hedgehog which would follow me about and make curious little grunting, squeaking noises, and another noise like the grinding together of lots of little teeth. He liked the kitchen best, where he could eat the cockroaches all night long, and we nearly always found him in the ash-pan under the kitchen stove, for all Prickleses like warmth.

He disappeared one day, and we lost him. I don't think our maid Mary liked him at all, because, as she said, she was "a-feard on 'im".

Prickles is very good to eat, very good indeed. The gypsies are very fond of him, and catch and eat as many as they can. When they catch him they cover him thickly with clay after they have killed him, and put him in a fire made of lots of sticks, and when they think he is done they crack the ball of clay which has become quite hard with the baking in the hot fire, and then the nicely cooked Prickles is taken out quite whole, the skin and spines remaining in the clay covering. It does not sound nice, I know, but the flavour is excellent and never to be forgotten.

Now you think I am horrid! Don't you?

THE HOLIDAY AT THE FARM.

It is now the month of May, and father and mother have taken you and your brothers and sisters to stay at Farmer Blenkinsop's very large farm for four months; and in those four months you may learn a very great deal about the Animals, Birds, Reptiles, Fishes and Insects you will find there.

Each of these creatures has its own particular work that God has given it to do in the world. Some of them live for many years, and some for only a few hours from the time they are born; so I want you to keep your eyes and ears wide open, and you will learn much that will be of great use and interest to you in the years to come.

Amongst other things you will learn the lesson of Patience.

THE RABBIT.

After you have had your breakfast, and washed your hands and face, father will take you where you will see the Misters and Missises Rabbit and their families. He knows exactly where to find them, because he has been down at the farm before, and shot many of the rabbit family to make nice rabbit pies, or stewed and roast stuffed rabbit!

Out through the garden gate, down the road you

go until you come to a narrow little road between high nut hedges, down which the hay is brought from the fields when it is made. Up the lane you walk, right to the top, until you come to a very large meadow. Follow father along the footpath, right across the meadow and down the bank, and you will see at the bottom a little stream, on the opposite bank of which, under the trees, you will see hundreds of holes all over the place.

Now you must be very still and look very carefully, and there you will find Mr. and Mrs. Rabbit and their little ones sitting about and playing, and washing their hands and faces. There, now! Do you see what you have done? You shook a bush and frightened them all into their holes; but you saw how very quickly they can move.

Mr. Rabbit belongs to the rodent or gnawing order of animals; his family name is LEPORIDÆ, and his own name is LEPUS CUNICULUS.

He is a very pretty little animal with long ears, ears as long as his head; his hind-legs are a little longer than his fore-legs, and that makes him look so funny and pretty. His colour, as you can see, is grey-brown with his under parts white, and his little tail, or "scut" as it is called, is white underneath, and it looks just like a little ball of cotton wool!

In America this little white tail of his has caused him to be called Molly Cotton Tail.

Mr. Rabbit is generally about sixteen or seventeen

inches long, and weighs from two to three pounds, though of course he often weighs more than that.

Mr. Rabbit is what naturalists call a gregarious animal, which means that he lives with his relations in herds or flocks or colonies, so therefore, when you see one Mr. Rabbit, there are lots of others close too, somewhere.

A rabbit colony is called a warren, and the holes of which you see so many are called burrows, which they make by scratching and digging with their fore-paws. You must watch him some day digging. He scratches hard and quickly with his fore-feet, throwing the sandy soil out behind him, between his hind-legs. So quickly does he work, that soon you cannot see him, but you see instead a stream of soil coming from out of the mouth of the hole.

Mr. Rabbit likes to live on commons covered with gorse and heath, and in plantations and coppices and woods.

Mr. Rabbit eats corn, grass, vegetable matter, and the bark of trees. He is very fond of creeping sometimes into Farmer Blenkinsop's garden, and eating his cabbages and other vegetables, and also his corn; so every now and then Farmer Blenkinsop takes his gun, and Sally his dog, and brings home a great many members of Mr. Rabbit's relations, which he sends to the market in the town near by. If Farmer Blenkinsop did not invite his friends to come and shoot Mr. Rabbit's relations every now and then, in

the months of August, September, October, November, December and January, the rabbits would multiply so quickly that there would not be enough corn and stuff on the farm lands to feed them, because they would be so numerous.

A gentleman once took some rabbits to Australia, and they multiplied so rapidly that in a few years they became quite a pest, and some farmers were nearly ruined by them; for they ate up nearly everything, and destroyed thousands of trees by eating the bark. The farmers at last were forced to try and get rid of them by driving them into great big wire-fenced enclosures, and then killing them. That did not do very much good, though what with trapping them in that way, and by shooting them, and in other ways, millions and millions of rabbit skins are sent out of Australia and New Zealand every year. Then the farmers tried laying poison for them, but that was not much use; then Mr. Weasel and his cousin Mr. Stoat were taken over in great numbers, but they soon got tired of eating Mr. Rabbit, and began to kill the fowls, so that they in their turn became pests.

So you see from that what would happen in our dear old England if Mr. Rabbit were not hunted very often.

Do you like rabbit pie? I do very much.

Mr. and Mrs. Rabbit make their nest at the bottom of their burrow. The burrow has two entrances,

and the nest is in another burrow inside this one, and is lined with fur which Mrs. Rabbit pulls from her own body.

After the little rabbits are born, and Mrs. Rabbit wants to go out, she covers up the entrance to the nest burrow with soil, to prevent Mr. Weasel or Mr. Stoat getting at them.

When the little rabbits are just born they are blind, and have scarcely any fur on them, but in six months they are quite big rabbits, and able to look after themselves. Here is a man who helps to keep down the numbers of the rabbit family; he is the Squire's keeper and is called Velveteens, because he wears a beautiful brown velveteen coat, and always carries a gun. Does not he look nice? You must go up to him one day, when he is sitting on the stile that leads to the wood, and if you talk very nicely to him he will tell you more about Mr. Rabbit, and also about all the little animals and birds he sees while he is walking about the woods and fields, keeping the bad men, called poachers, from killing the Squire's game.

Mr. Rabbit eats two meals a day, really—a very big breakfast very early in the morning, and a very big tea-supper; and he lies basking in the sun at the entrance to his burrow, or near by, during the hot part of the day, or he may go to sleep in his burrow when he feels tired. So you see the best time to see him is early in the morning and in the evening.

"Velveteens."

When you grow big enough father will buy you a gun and take you with him to shoot rabbits. So make haste and eat lots of puddings!

THE HARE.

Mr. Hare is a big cousin to Mr. Rabbit, and is called by sporting men "Puss". His real name is Lepus Europæus.

He is in shape very like Mr. Rabbit, but much bigger altogether. In colour he is a sort of yellow browny grey on the upper parts, and white underneath. His ears are very long, and with black tips. As a rule his length is from one foot eight inches to one foot ten inches, and he weighs from six to nine pounds. "Jugged hare and red currant jelly?" "Yes, please, a little more of the middle of the back, and just a little more gravy! Thank you."

There are not so many hares in England as there are rabbits, and they are not gregarious like Mr. Rabbit, but like to live alone, really, amongst grass and brushwood. The places where they live are called "forms". The "form" is a kind of resting-place flattened down in some sheltered spot. Here Puss sits during the day, leaving it at night to find food, which is similar to Mr. Rabbit's. Puss lives in this same "form" most of the year, but he sometimes becomes rather tired of it, and perhaps a man with a

gun has found it out, and had a shot at him as he left it, so he runs away and makes another "form".

Puss can run very fast, and it makes Mr. Greyhound put his best foot foremost to beat him. He is hunted by men with greyhounds, and this sport is called Coursing, and is most fascinating to watch, though some people consider it very cruel indeed. It is certainly more cruel to kill Puss in this manner than it is to shoot him.

Puss is very timid and easily frightened. He can hear the slightest sound, for his ears are so large and so placed in his head that the least sound you make he hears, and is off like an arrow long before you get up to him as he sits in "form".

Puss is a very knowing animal, and when you disturb him by making any sound that he can hear with his long ears, he either runs very quickly away, or flattens himself against the ground to prevent your seeing him.

Mrs. Puss has from two to five young ones which are called "Leverets," but I cannot think that she loves them very much, because in a month she turns them out of the nest and leaves them to look after themselves, and then Mr. Fox often finds them, and takes them home to his little cubs for their breakfast. Poor little leverets!

When Mr. Greyhound chases Puss he is often beaten, because Puss makes sudden sharp turns which are called "wrenches," and as Mr. Greyhound is not

quite so nimble, Puss sometimes gets away from him by making a number of these sharp turns in every direction.

The fur on Puss's hind feet is nice and soft, and is much used by actors and actresses as a kind of softening brush when they paint their faces to go on to the stage.

But I must tell you that if you want to catch Puss in the field, you must go to the hedge and make a noise like a turnip; at least that is what a man told me years ago, though I have not tried it, as I prefer catching him on the run with my gun.

THE FOX.

You like roast goose at Christmas, don't you? Well, Mr. Fox likes raw goose at any time, and never suffers from tummyache after dinner! Happy Mr. Fox!

Mr. Fox is a cousin to Mr. Dog; in fact, Mr. Dog has cousins all over the world.

They belong to the order called Carnivores, because they eat flesh. Mr. Fox's family name, Canis Vulpes, sounds just the kind of name that should have been given to him.

Mr. Fox is one of the best-known animals in England, and one of the most sought after, not that he is at all good to eat, though Mr. Foxhound likes him for lunch very much.

In colour he is a beautiful reddish brown on the

upper parts, and quite white underneath, and the points of his ears are black, and so are the outer sides of his legs; on the end of his tail is a pretty white tip.

From the tip of his nose to the tip of his tail his length is from about three feet six inches to about five feet.

Mr. Fox generally sleeps during the day, and comes out at night from his burrow, or "earth" as it is called, to hunt for food, which consists of cocks and hens, and chickens, and ducks, and geese, and pheasants, and partridges, and hares, and rabbits, in fact everything that is good in that way. He catches Mrs. Pheasant and Mrs. Partridge while they are sitting, poor dears, on their nests hatching out their children.

He steals quietly at night into Farmer Blenkinsop's fowl-house, and always takes the fattest and tenderest fowl, and this makes Farmer Blenkinsop so angry, that he feels he would like to sit up one night and shoot Mr. Fox, but he does not do that, because he likes to hunt Mr. Fox with all the fox-hounds and huntsmen and ladies and gentlemen. So, instead of shooting Mr. Fox, he takes care that all his fowls, and ducks, and geese, and turkeys are fastened up safely at night, and thus prevents Mr. Fox stealing them.

When Mr. Fox cannot get all these nice things to eat he does not mind catching mice and rats, and if

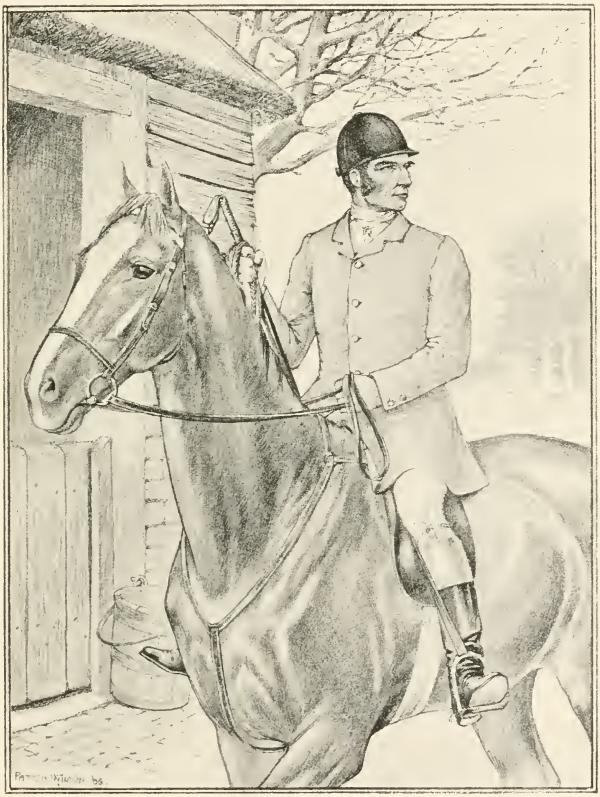
he lives near the sea he will eat crabs and fish and such shell-fish as he can find. It is said too that he does not object to eating any dead animals he may find, but he must be hungry to do that.

Mr. and Mrs. Fox make their home in a burrow or earth, which they make for themselves by digging up the ground with their feet, though sometimes, if they feel lazy or too tired to make one, they will make their home in one of Mr. Badger's old homes, or even Mr. Rabbit's old home; and in April or May in this home the little fox cubs are born, four or five of them, such funny little things and so pretty. In October they are hunted by hounds followed by ladies and gentlemen on horseback. This is called Cub-hunting.

When Mr. Fox is full grown, and can run very fast indeed, and he is hunted by a big pack of fox-hounds, he sometimes runs across the country in a more or less straight line, and then the hunt, as the hounds and followers are called, have to gallop as fast as their horses can carry them, and the hounds must run as fast as they can put foot to ground to catch him. Sometimes, when he runs well, and for a very very long distance, and gives the hunt a fast and most enjoyable gallop, and runs at last to an "earth" to escape the hounds, the Master of the Hounds will say to the huntsmen and the whips: "No, we will not dig him out this time, but leave him where he is. He is a fine, game fox,

and has given us one fine afternoon's sport, and will on some future day give us another run as good as this one." So they leave him alone.

I remember once, a few years ago, I was out with my gun, wandering through fields and commons and little copses. While I was walking quietly along the side of a wall (in some parts of England they have walls instead of hedges) looking across the beautiful country and thinking how wonderful it all was, suddenly I saw, dashing through a gap in a "wall hedge," a good-sized Mr. Fox. I stood quite still, and as my clothes were about the same colour as the wall, I stood quite tightly against it. Mr. Fox did not see me, and ran along the bottom of the wall for a little distance, then jumped so easily on to the top of the wall as though he had only been running a few hundred yards, instead of which he had run for nearly six miles. He ran a little way along the wall towards me until I could have touched him. He saw me, however, and jumped down, and ran on in the same direction. Presently I heard a thudedy, thudedy, thudedy, thud, thudedy, thudedy, thud, and then the sharp notes of the huntsman's horn, and, looking in the direction from which Mr. Fox came, I saw the pink coats (they are really scarlet, but hunting men call them "pink") and the galloping hunting people, but while they were still far away I heard the never-to-be-forgotten sound of foxhounds close to me running hard on the



Tom Jenkins.

scent (Mr. Fox is hunted by scent and not sight). When you see a Fox-Hunt, some day, you will be quite excited! Presently two or three hounds dashed through the hole in the hedge bottom, through which Mr. Fox had come, right up to the spot in the field from which Mr. Fox had jumped on to the wall. There the hounds were for a few seconds "at fault," that is, they could not quite find out where Mr. Fox had gone to because he had left no scent behind, but they soon knew that, for a cunning old hound, who had hunted Mr. Fox for four or five seasons, suddenly jumped up to the place on the wall and gave a cry. Over he went followed by all the others.

In another few seconds up came the Master of Hounds, huntsmen, and whips, and the rest of the hunt, and they passed me with a thundering of hoofs beating on the ground, and the heavy breathing and snorting of horses, squeaking of saddles, and all had gone!

Poor Mr. Fox! An hour after that I made my way home, and happened to be passing an inn on the lonely country road, and I saw one or two gentlemen whom I had seen following the hounds, so I asked them whether or no they had killed their fox. They said, "Yes, we caught him two miles further on".

When Mr. Fox is caught, his feet, which are called "pads" (never call a fox's feet, feet, always call them "pads"), are cut off, and so is his head,

which is called the "mask," and his tail, which is called the "brush". The member of the hunt who is first up when the hounds have caught Mr. Fox has the "brush" to take home and have "cured and mounted" to hang up to look at and admire during the long winter evenings.

Father may be able to tell you lots of stories about fox-hunting; but if he cannot tell you, go up to the kennels and talk to old Tom Jenkins, the huntsman.

THE WEASEL.

Father is just taking you for a little walk along the road past the farm, where jolly old Farmer Blenkinsop keeps his cows, horses, pigs, and fowls, and ploughs, and carts, and waggons. When you have gone some distance along the road, take the little lane on the right-hand side, a lane between low hedges on high stony banks, and go quietly along, keeping your eyes wide open all the time for any little creature you may see. There, now! I thought you would see something. Look! Do you see that little brown head with a sharp nose and bright shining eyes peeping out at a hole in the bank? That is Mr. Weasel's head; the rest of his body is in the hole.

Don't go any further, but take father's hand and go back a few yards until you have come to the gate you have just passed. Go through this gate, and walk very quietly and slowly along under the hedge

Mr. and Mrs. Weasel.

in the direction of Mr. Weasel's hole. Don't make the least noise, or you will frighten him. When you have come right opposite to the hole, peep through the hedge and wait a few moments, and you may see him come out. Yes, there he is. Is he not pretty? You see the upper parts of his body are beautiful red-brown, with white underneath parts. His neck and body are long, his tail is short, and so are his little legs.

Mr. Weasel belongs to the order CARNIVORA. His family name is MUSTELIDÆ, his own name being MUSTELA VULGARIS.

In length he is generally eight to ten inches from the tip of his little nose to the tip of his little tail. Mrs. Weasel is smaller than Mr. Weasel.

In some countries in the north of the world, where the weather in winter is very very cold, Mr. Weasel puts on a white coat in the winter instead of a brown one; but he does not do this in England, because it is not cold enough in the winter time.

Mr. Weasel is to be found almost everywhere, in hedges, banks, woods, and coppices and dry ditches. For his breakfast, dinner, tea and supper he eats little field-mice, rats, voles, young birds and insects, and sucks little birds' eggs, and likes them just as you like bread, preserve, and toffee, and cake, and biscuits, and all other nice things in mother's cupboard.

Mr. and Mrs. Weasel made their nest in a hollow

tree, dry ditch, or a hole in the bank where you saw him first. They line it with dry grass and leaves. They are very very fond of their children, and will fight like anything to defend them.

Sometimes Mr. Weasel runs after and kills Mr. Rabbit and his family; yet he really does not do much harm on the land, but a great deal of good instead, for he eats up the mice, rats, voles and insects that eat up Farmer Blenkinsop's crops. Velveteens, the keeper, who takes care of the Squire's pheasants and partridges in the fields and woods, thinks that he is a very wicked little beast, so he shoots every one that he can with his gun or kills them with his stick. I am sorry—aren't you?

Old people in the country say "You cannot catch Mr. Weasel asleep". I never did, and I don't think you ever will! Ask father if he ever did!

THE STOAT.

Mr. Stoat is a cousin to Mr. Weasel, only much bigger. He is generally from twelve to fifteen inches long, from the tip of his nose to the tip of his tail.

His colour is very like Mr. Weasel's, only the brown is more dull, and instead of white underneath parts, he is yellowish, and his tail has a black tip to it.

In the winter time in England, Mr. Stoat always changes his brown and yellow coat for a white one, though his tail remains black.

You remember the furs mother wore last winter? Well, they were made of Mr. Stoat's family's winter coats, and the little black pieces are their tails. The fur is so soft and nice and beautiful in the winter, but mother would not wear furs made of Mr. Stoat's summer coat.

Mr. Stoat has two names—they are Stoat and Ermine; and the fur that mother wears is called ermine.

The Kings and Queens of England have always worn ermine fur. Our good King Edward and Queen Alexandra wear ermine fur.

Mr. Stoat is really a wicked little animal, and he does much harm all over the country. Velveteens kills Mr. Weasel for lots of wickednesses that Mr. Stoat does. Mr. Stoat *does* kill partridges and pheasants, and I wish Velveteens would understand that; but he does not, and it is really not surprising, for Mr. Stoat and Mr. Weasel are members of the same family, and he thinks that they both do the same amount of damage.

Mr. Weasel does sometimes kill Mr. Rabbit, and Mr. and Mrs. Pheasant, and Mr. and Mrs. Partridge, but it is very seldom; but Mr. Stoat is really much more to blame than Mr. Weasel. Mr. Stoat loves Mr. Rabbit, and will hunt him every day nearly;

but Mr. Weasel will only hunt him when there is nothing else close handy to eat.

When Mr. Rabbit knows that Mr. Stoat is hunting him to kill and eat him, he becomes quite frightened, so frightened in fact that he seems unable to run very far away, though he is really able to run very very much faster than Mr. Stoat. So when Mr. Rabbit knows that Mr. Stoat is hunting him he runs a little way, then stops, then runs another little way, and another stop, and all this time Mr. Stoat is creeping nearer, and nearer, and nearer, until at last Mr. Rabbit becomes so frightened he cannot go a step further, but lies quite terror-stricken and crouches flat on the ground, unable to move from fear, crying like a little baby. Then up comes Mr. Stoat with a jump, and . . . Mr. Stoat is not hungry any more. In some parts of the country where there are plenty of hares and rabbits, and fowls, and other animals, Mr. Stoat only sucks their blood, or eats their brains, and does not touch the body. So you see he is very wasteful indeed. I am sure he is, because I have seen him kill a rabbit, so I know what I am telling you is true.

When you pass Velveteen's cottage, you will notice close by the hedge a kind of museum, called the "Gamekeeper's Larder," made by hanging all kinds of animals, birds and reptiles on wires stretched from one trunk of a tree to another, and I think you will see many stoats and weasels hanging there ; and

when you are older, and know much more about the little animals and birds, and reptiles, and insects, you will be most sorry to find so many creatures hanging there who have not done the harm people think they have done.

These little country museums do certainly teach you a great deal about the formation of the little creatures which live in our England, but they also make you feel quite sorry—so very sorry, when you are quite sure that most of the poor little creatures hanging there have done very little harm. You must not be angry with Velveteens, because he does not know any better, and he thinks that he is doing his duty by killing all these little creatures. You must be angry with his master, the Squire, who really ought to know what harm and what good all the little animals that live in the country do.

This is a list of objects I saw in one of these little gamekeeper's larders—three brown owls, nine stoats, seven weasels, two herons, one polecat, one hedgehog, five jays, two ravens, five rooks, I forget how many rats, one sparrow-hawk, three kestrels, and other creatures I cannot remember; and Velveteens was very proud of it, and of killing the herons too. He said the herons ate the young fish in his master's ponds! I am quite sure that the Squire would not mind that very much. Do you think you would mind if you were the Squire?

THE GENTLEMAN IN VELVET.

THE other day when you went with father to see Molly Cotton Tail, you went through a field in which were hundreds of small mounds of brown earth, and though you may have seen them, you were too eager to see Molly Cotton Tail to ask father what they were—so I will tell you. They are heaps of earth thrown up by Mr. Mole when he is making his tunnels under the grass.

Mr. Mole is called "the gentleman in velvet" because his fur is so very soft and delicate; in fact it is much softer than the finest and most expensive velvet.

Really, the name Mole comes from the name Mouldiewarp, which means mould (or earth) caster, because he casts or throws up the earth when he is burrowing his way under the grass.

In these pages I think I had better call him Old Moley—shall I?

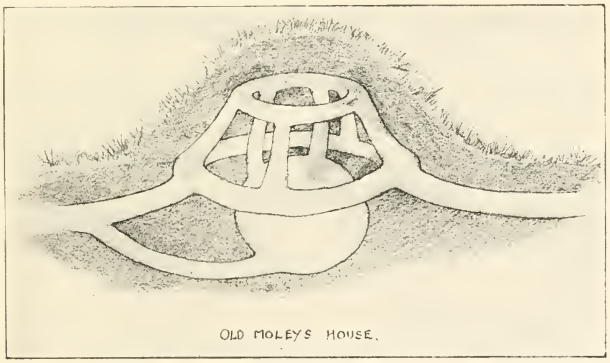
Well then, Old Moley is about six inches from the sharp tip of his funny little nose to his funny little tail. His tail is just one inch in length, so you see his body must be five.

He looks like a fat, sharp-nosed, dark grey velvet sausage. Now, whenever you see anything answering to this description, you will know it is one of Old Moley's family. You must remember, however, that the velvet sausage has rather large hands, with long

nails and pink palms, and hind feet as well, but they are very close to the body.

Old Moley's hands are very much like our own, but his arms are very short. His hands are turned palms outwards, and are very strong, as they indeed must be, to enable him to burrow so quickly.

Farmer Blenkinsop does not like him at all, because he upsets all the roots of his crops by burrow-



OLD MOLEY'S HOUSE.

ing underneath them—you see his runs or tunnels are only just below the surface ; so Farmer Blenkinsop has them trapped by a man who does not do very much else but catch moles.

Old Moley belongs to the order INSECTIVORA, and his name is TALPA EUROPÆA. When he happens to come above ground he cannot see very well, on account of his being unaccustomed to the strong light, from his living so much underground ; neither

can he run very fast. He was not made for an open-air life, because all his food is found under the ground.

You must not think that you will find Old Moley in any of these mounds or mole hills, even if you dig ever so deeply. These mole hills are connected by a "run" or burrow and are pushed up from below. He makes several of these runs in all directions, and these runs he uses in order to obtain the worms and various larvæ of insects which he eats for his meals.

One of these runs is larger than the others, and is the main road to his house.

His house consists of two circular burrows or galleries, one above the other, each with little side passages which run into his one room, and this room is his dining, drawing and bedroom and kitchen all in one. The runs or burrows lead off from the lower circular burrow or gallery, which is larger than the upper one.

Old Moley's home is made in a sheltered position, and sometimes between the roots of trees; and here, in a nice little comfortable bed, lined with dried grass and leaves, are born five little baby moles which are carefully nursed and fed by their father and mother, until they are old enough to leave the nest to make a home of their own.

Old Moley is very greedy and eats till he positively cannot eat any more; and when he has eaten as many worms and insects as he can, he goes to sleep at once. When he wakes he goes at it again.

It is said that if he went without food for ten hours he would die. I have not made the experiment, so I cannot speak from experience.

Old Moley and his relations are trapped for the sake of their skins, which are so nice and soft, and make such beautiful coats and fur things for ladies.

Farmer Blenkinsop does not mind in the least how many Old Moleys are caught on his land, and he pays the old molecatcher to catch them, who places his trap in the main or largest run.

I must say I feel rather sorry for Old Moley, but then you see I have no farm. If I had, I daresay I should not like him any more than Farmer Blenkinsop does.

In the fields I daresay you have seen sticks stuck in the ground with black objects dangling all over them, and if you go and examine one of these sticks you will find that the black objects are poor dead moles. Some have been hanging there for weeks, and do not smell at all nice, but if you see one freshly hung up, you will be able to examine it, and you will then see for yourself how funny his little pink "hands" are.

THE WATER RAT.

Did you ever hear, whilst you were walking along the side of the stream, a sudden "plop" in the water just under the bank, and see a lot of circles in the

water gradually widening and widening, until they reached quite to the other side of the stream? I say, what a long question! I feel quite out of breath! Never mind, that "plop" noise was caused by Mr. Water Rat, who has just dived in, because you disturbed him at dinner by walking too near his picnicking ground.

I must first tell you that Old Water Rat is not really a rat, he is more properly called a Water Vole. He belongs to the family MICROTUS, and his museum name is MICROTUS AMPHIBIUS.

He is just about the same size as Mr. Brown Rat, but his tail is much shorter. In colour he is a nice dark brown, but sometimes he may be almost black; and his fur is nice and soft.

As you saw just now he can swim very well indeed, and can swim long distances under the water. Next time you see him swimming across the stream say "Hello!" to him, and watch the quick way in which he dives, and then perhaps you don't see him again.

I do so wish I could swim as well as Old Water Rat can, but I cannot, and I never shall, nor will you, I am afraid.

On account of his excellent swimming and diving, some people will tell you that he catches and eats fish; but don't you believe them, for he eats instead the pith of flags and other plants which grow in the water.

In the winter time, if the weather is very hard, with lots of frost and snow and ice, he will eat the barks of some trees, and if he lives near market gardens he will even eat swedes, mangold-wurzels, turnips, potatoes, and all kinds of vegetables and roots.

Mr. and Mrs. Water Rat make their nest in a very long burrow or tunnel, on the banks of the stream in which they swim and play, and in this burrow the little water rats are born, though sometimes water rats will live a long distance away from their stream.

When I was a very naughty boy, I did not know that Old Water Rat was such a harmless little animal, and I and several boy friends used to take walks along the river-side, hunting Old Water Rat and all his family connections. I need not tell you that each boy carried a catapult, all home-made (those you buy in the shops are no use at all), and we used these weapons against poor Old Water Rat, and I now regret to say that we killed many of the poor little chap's family. You see we were very good catapult shots.

I am very very sorry now, because I know we thoughtlessly and wantonly killed harmless animals. I always thought it would be rather nice to have a waistcoat made out of water-rat skins, but by the time I had collected nearly enough skins, I found out how cruel we had been, so I had no pretty waistcoat after all.

Now when I see Old Water Rat I simply stand perfectly still, and try to learn something more about him ; and when I have learned a great deal more I will tell you all about it. May I?

THE OWL.

"HOOTY," as I shall call him, is a curious-looking bird, though for all that, I am very fond of him.

He belongs to the bird order called STRIGES, and his museum name is SYRNIUM ALUCO.

Though there are several kinds of owls in England and Scotland, "Hooty" is the only one I shall talk about.

There is a kind of owl that lives in buildings. He is the Barn Owl ; but I shall not take any notice of him in this book ; perhaps some day I may tell you about him.

My Mr. SYRNIUM ALUCO lives in woods and forests. He has really other names, such as Tawny Owl, Wood Owl.

His colour is rather nice. The round feather circles round his eyes are whitey-grey, with brownish borders on the outside edges. The top of his head, and neck, and back, and wings are a kind of brown mottled grey. Some of his larger feathers are barred with whitey-grey and brown, and his tail feathers are barred with brown. His throat, chest and stomach feathers are whitey-grey, with streaks and

splotchings of brown. So you see he is all brown and grey really.

"Hooty" is a nocturnal bird, and rarely ever comes abroad in the daytime, for his eyes are not able to bear the strong light of day. So he sleeps all day long with his eyes tightly closed, and then when night time comes, he opens them wide, shakes his feathers, and glides out of his hiding-place into the dark night to find a nice supper.

His hiding-places are in hollow trees, and trunks, and sometimes in ruins.

His supper consists of rats, mice, moles, shrews, voles, field-mice, frogs, rabbits, beetles, and fish if he can get it. He therefore has a good choice of food.

When "Hooty" is trying to find a wife, when the spring-time comes round, he flies about giving voice to a very funny noise, just like a laugh, not a laugh like Ha! Ha! Ha! Ha! Ha! Ha! but more like Hoo! Hoo! Hoo! Hoo! Hoo! Hoo! only it seems to be joined together somehow. When Miss Hooty hears this, she answers him, and then they talk to each other, and decide finally to set up housekeeping together.

They then find a nice hole in a hollow tree in which Mrs. Hooty lays three or four white eggs which are perfectly oval in shape, in fact almost round, and you cannot tell which is the large end and which is the small end.

At this time Old Hooty's voice changes, and he

sits up in the tree on nice moonlit nights, saying every now and then, "Tu-wit! Tu-whoo! Tu-wit! Tu-whoo!"

Hooty and his wife feed their children for quite a long time after they are fledged and able to fly. I think they are silly to do so—don't you?

Owls, after eating a mouse or bird, throw up the fur or feathers in the form of little balls or pellets. These are called "casts," and may often be found under large hollow trees in the woods.

The cry of the owl is very curious when heard at night, and if you are not expecting to hear it, it startles you for a moment.

Hooty used to sing under my bedroom window every night, and I was very pleased.

Some boy friends made me a present many years ago of a full-grown Hooty, and I kept him for some days, hoping to tame him. I put him into a garret which had a good-sized window glazed with small diamond panes; the room was quite empty. I got some pieces of tree boughs and nailed them up as a kind of perch, stopped up all holes in the floor, caught mice and turned them in for him to eat at night. However, he was too wild, and one day when I opened the door to give him some more mice, he suddenly flew straight at the window, which broke, and he was gone! I was sorry, though he clawed me severely once or twice—and their claws are sharp!

You see he catches mice, and rats, and rabbits, moles, and other little animals by swooping on them and clutching them with his large sharp claws; and when once he has his claws or talons on any little animal it never gets away again.

People who lived hundreds and hundreds of years ago regarded Old Hooty as a sacred bird, and called him the "Bird of Wisdom".

Old Hooty has several names, such as Brown Owl, Tawny Owl, Jenny Howlet, and Hoot Owl. What a lot of names! and what muddles some of his friends must get into when they are talking of him! How many names have you?

THE KESTREL.

THE Kestrel is a bird of prey, which means that he catches and eats other birds and small animals; but you must not think him cruel for doing that, because they are his proper food, just as much so as that which mother gives you is your proper food.

The kestrel belongs to the FALCONIDÆ family of the order of birds called ACCIPITRES, and on his glass case in the museum you will find his own name, which is FALCO TINNUNCULUS. He is very pretty to look at.

In length he is between ten and twelve and a half inches. The top of his head and neck are a sort of grey colour with streaks on it. His upper parts are reddish brown, spotted all over with black spots; I

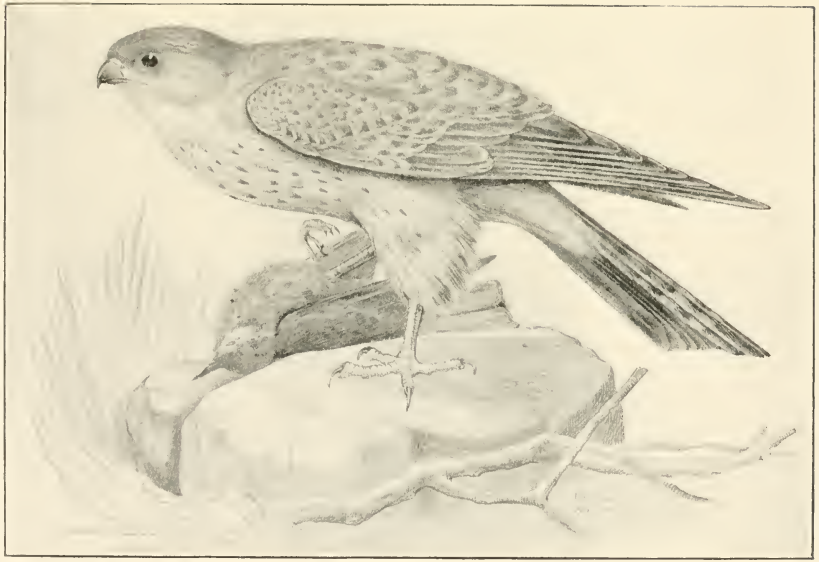
think there is one spot on every feather. His wing feathers are darkish grey with lighter edges. His chest and throat and stomach feathers are dotted all over with little dark streaks. His tail is greyish with bars across it. His legs are yellow, and he has a short, sharp hooked beak. Here he is! Look at him!

For his meals he is very fond of mice, birds, beetles of all kinds, sizes and shapes and colours, and sometimes worms; so you see he is fond of change.

Mr. and Mrs. Kestrel make their nest usually on rocks, sometimes in hollow trees; but I have found them more often in trees, where they take the deserted nests of magpies, wood-pigeons or crows. I don't think that the nest is very comfortable, as it is a very rough affair of jumbled-up sticks and twigs, and no attempt whatever at lining it with something nice and soft and warm for their young children.

In this uncomfortable nest Mrs. Kestrel lays four or five fat eggs, not at all like the shape of your breakfast egg, but rounder and reddish in colour, and spotted all over with deep red. Kestrels' eggs are not always alike in colour, though they are the same shape, for sometimes they have a darker coloured ground and larger spots and splotches, but they are always reddish.

When the young kestrels are hatched they are funny-looking little balls of yellowy-grey fluff, and their parents are very fond of them, and scream with anger and rage when you climb the tree in which is their nest.



KESTREL

Once, years ago, I took a kestrel's nest with young ones in, and brought them up as pets, and very nice pets they were too!

At one time I had as many as eight or nine in a nice little house with a wire front.

If you take the young ones when they are really too young to leave the nest, you have to feed them often with scraps of meat, as their parents did, because they are not yet quite capable of tearing it to pieces themselves; but if you leave them till they are nearly ready to leave the nest, you will not have nearly so much trouble.

If ever you have the good fortune to get a nest of kestrels, and I hope you will, give them mice and beetles and birds if father will let you; lites, of which you can buy a large piece at the butcher's for a penny, is very good for them, and they like it very much.

I was older than you when I had kestrels, and as I also had a gun, I killed the Jack Sparrows for my pets to eat.

When they eat their food they stand on it (fancy you standing on a plateful of nice dinner!) and tear it off in nice beakfuls and swallow it down. When I fed my pets, each was afraid that the others might possibly steal his dinner, so he covered it with his wings. I noticed that some time after their meal of birds that they did as the owl does, throw up or eject a ball or pellets containing some of the feathers and the skulls!

They were jolly little birds! One was very tame indeed, and was very fond of me, and would sit on my shoulder, nestle up to my cheek, making such a pretty, quiet, chittering noise. Then he would playfully nibble my ear with his sharp little beak; but sometimes he forgot how sharp it was, and I had to tap him gently for being so naughty, and then he was, of course, very sorry! Another was, I think, a little jealous; he must have been, and if I did not take care he would suddenly pounce upon my head and tear with beak and talons at my hair. I tried all ways to make him love me, but all in vain. I gave him the fattest sparrows, the largest piece of lites, and though he ate them all up, he liked me none the more for it.

Dick, the nice one, died in a year or two's time, and, of course, I was very very sorry.

In their house I kept a magpie which I had caught when young. He was full of mischief, chock-full, and one day just for fun (as he thought) he pulled the string of the door latch, the door swung open, and out and away flew all the kestrels! I arrived just in time to see the last one go. Jack the Magpie sat on the doorstep chuckling to himself, thinking, no doubt, what a splendid joke it was to play on me, and I felt I could have killed him, but instead I gave him away to a friend, who afterwards wished he had never seen him, because he was so very naughty and stole so many things.

None of my kestrels ever came back to me to live, though one came occasionally and sat on the front porch, and would eat birds I threw up to him, but the moment I got a ladder to catch him, he was off like a bullet out of a gun! He did not care how often he came so long as I did not attempt to catch him.

Presently, however, he ceased coming, and I have no doubt that he fell a victim to Velveteen's gun.

Really, Velveteens is a very silly man to do all this killing. He kills as many kestrels as he can, because, he says, the kestrel kills young partridges and pheasants and chickens. As a matter of fact, however, the kestrel does a thousand times more good than harm, though perhaps he may take an occasional game-bird, and I know he has now and then taken a chicken or two—and it is no wonder, for they are so nice and tender!

If country people would only take the trouble to find out what the kestrel does eat, they would never shoot him at all, but let him have his own sweet way.

He kills and eats the mice and voles which destroy Farmer Blenkinsop's corn, and he eats all kinds of beetles, and I think I shall be quite within the mark when I say that for one young partridge he takes, he kills hundreds of voles and mice!

The kestrel has other names, such as Stannel, Wind-hover, and Hover-hawk.

He flies high in the air, looking down on the fields watching for his dinner; presently he stops and hovers in the air, using his wings quickly as he spies a mouse; then he suddenly drops like a stone right on to the mouse, clutches it in his talons, and flies away off to his nest. If ever you go up in a balloon or flying machine and you see far beneath you an apple tree laden with some of the most delicious apples in the world, don't try to get them in the same way as the kestrel does his dinner, because it might be very unpleasant for both you and the apple tree, besides you would make such a dent in the ground!

How very keen must be the kestrel's eyes to espy such a tiny thing as a mouse from such a tremendous height!

THE KINGFISHER.

The little bird I am now going to tell you about catches minnows without hooks and lines and worms. He is very fond of minnows is Dan Kingfisher.

He belongs to the Halcyonidæ family of the Picarian order of birds, and his museum name is Alcedo Ispida.

He is so beautiful, and as he flies he appears like a little chip of rainbow thrown through the air by a fairy. Green, blue, orange-brown, white and black

are the colours of his feathers. His beak is black, and his legs and feet like thin sticks of coral. Don't you wish that we could wear such beautiful clothes? In length he is about seven and a half inches.

Many years ago men wore clothes of all colours, and looked nearly as beautiful as Dan Kingfisher, but now, that silly thing, Fashion, says we must not wear colours at all!

Dan and his wife feed on fish which they catch in the stream, and on some kinds of insects.

It is most interesting to watch them as they sit on a branch of a tree overhanging the stream, their bright eyes kept wide open for any fish that swim underneath them.

Presently a little minnow comes up to the top of the water to take a little insect that has fallen in, little thinking that there is a little bird sitting up above him who is very fond of fish for dinner. Suddenly little Dan cocks his eye downwards, spies the little minnow, and, like a flash, darts down to the water and flies up again with poor little minnow in his black beak.

Dan often misses the fish; and it is no wonder really, for fishes move like lightning, so of course he has to be very quick as well.

I am sure I should go hungry and die if I had to find my dinner by diving into the water to catch fish, and you would too; but you see we are not kingfishers.

Mr. and Mrs. Dan Kingfisher live in a long burrow which they make in the bank of the stream, and in the end of this burrow Mrs. Dan lays six or seven eggs, perfectly white and almost perfectly round.

Sometimes the eggs are laid on a kind of nest made of old fish-bones, but just as often there is no nest at all, but the eggs are laid on the bare ground.

When the little Dans are hatched out, their father and mother work very hard at fishing so as to feed them.

They are always very hungry, and their father and mother must get very tired and headachy through diving all day long—but I don't suppose they do after all.

One of these days while you are sitting catching fish you will see him darting to and fro, up and down the stream, in and out of the sunshine, finding fresh hunting grounds. You see, the fish soon find out that if they see a chip of rainbow sitting above them, they are in danger of losing their lives, so they move to another spot in the stream ; but Dan follows them up and down.

Dan and his brothers, and sisters, and cousins, and aunts, and uncles leave us in the winter to go to warmer countries. Before he takes his flight he lives for a little while by the sea, eating insects and little crabs and things. Then they fly right across the sea, and come back to us early in the following year.

"PEKKERWOOD."

Did you hear that? No! Well, listen then! There! it is nearer now! Some one laughing at you? No! That is Old Pekkerwood, or to speak properly, Mr. Woodpecker. Isn't it a funny laugh? Really, I think he means to laugh, for he seems always so happy. He laughs in the sunshine, he laughs in the shade, and he laughs in the rain; in fact his face is so funny that it seems that he must laugh because he does not know why, and does not care.

If you see Old Pekkerwood close to, you will notice that he seems to be thinking of something, and that something about which he is thinking makes him burst with laughter. He laughs so much that it is a wonder tears don't run down his cheeks!

He is a relation of Dan Kingfisher, and belongs to the Picidæ family of the Picarian order of birds, his label name being Gecinus Viridis.

He is beautifully coloured, principally green, though he has a beautiful crimson top to his head. You see the bark of the trees is greenish, and the leaves are green, and it is very difficult to find him when he is creeping up the tree trunks and boughs.

He has a beautiful yellow patch on the bottom of his back.

His beak is long and strong; indeed, it must be, because he has to dig holes in the trees, and break

away the bark to find his food, which consists of grubs and insects which make their homes in the trees.

He creeps up, and down, and round, and round the trunks and boughs of the trees, hunting for his dinner, laughing heartily now and then.

Pekkerwood's legs and claws are strong and sharp to enable him to creep in all directions on the tree trunks, and his short strong tail he uses to steady himself, and to give power when he is working his pickaxe beak.

His strong beak he uses like a pickaxe, and you can hear him working quite a long way off.

Tap, tap, tap, tap—tap, tap, tap, tap, he goes, digging and boring away at the trees, and dragging out of its hole some nice fatty grub or beetle, and swallowing it down without salt, or pepper, or mustard.

Mr. and Mrs. Pekkerwood's nesting place is in a hole in a tree trunk or bough.

Sometimes they make a hole themselves, and sometimes they only make larger a hole which they find.

If you happen to find a Pekkerwood's nest, you must not expect to find the eggs easily, for they do not always make their nest just inside the hole, but instead, it is bored some distance down into the tree, and I don't think your little arms would quite reach so far down.

To get at the eggs I sometimes used a long stick with a little sticky stuff called bird-lime on the end of it, and putting it carefully down to the bottom of the hole, touch one of the eggs, which sticks to the bird-lime, and draw it up again.

This needs great care, as the eggs are very tender.

Now-a-days little boys are not allowed to take birds' eggs, for at the Houses of Parliament at Westminster, the gentlemen have passed what they call the "Wild Birds' Protection Act," and if you were caught taking eggs of most birds, you would get into great trouble, and your father might have to pay a great deal of money to get you out of it!

I know very well that *you* would not take more than one egg out of each nest, but then every little boy is not so thoughtful and kind, and that is the reason for the Wild Birds' Protection Act.

These naughty boys are not content with taking *all* the birds' eggs, but they sometimes *kill* the poor birds as well, so you see that good boys' instructive pleasure is spoiled by naughty boys' wickedness.

Mrs. Pekkerwood lays from four to seven shiny white eggs on the bottom of their hole, which is made soft by tiny pieces of decayed wood. There is no need for them to make a nest of leaves, and grass, and feathers, and twigs, because the decayed wood is so soft and warm.

When the little Pekkerwoods are hatched they are very hungry, and as they grow older they climb up to the outer hole to wait for their father and mother who are bringing nice fat grubs for them to eat.

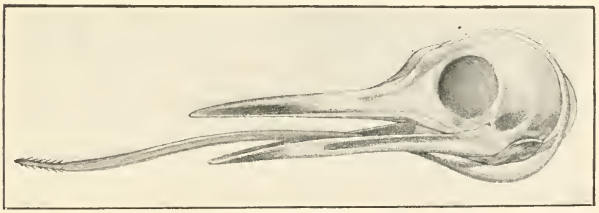
He seems to know exactly where a grub or insect is, and he hammers and picks away until he has that grub safely inside his crop.

As a rule, Pekkerwood makes for the decayed or

decaying parts of trees, as he knows he will find more grubs and insects there, and under the bark of dead boughs and branches he finds quite a lot of food. He rams his strong beak under a piece of dead bark and tears it away, just as you would with a chisel. I wonder what we should look like trying to tear off pieces of bark with our noses!!

Old Pekkerwood knows how to bore holes in wood, for the holes he makes look like the holes the carpenter makes with his round-and-round-wind-up thing.

His tongue is long and barbed like this—



and covered with a kind of sticky stuff which causes the insects and grubs to stick to it.

He eats ants as well as grubs, for I have seen him pegging away at the ant-hills near the edges of the woods and coppices.

I daresay that Velveteens would get one of the Pekkerwood's eggs for you if you asked him nicely. Try, and see!

"JAY BIRD."

"JAY BIRD" is full of mischief and wickedness, and is regarded by Velveteens as one of his chief enemies, and is shot by him whenever he sees him.

Jay Bird is a perching bird, of the order PASSERES, and belongs to the CROW family or CORVIDÆ. His name is GARRULUS GLANDARIUS.

He is quite beautiful to look at, and you would think that his voice should be quite as beautiful as his looks; but you will be mistaken, for his voice is quite screechy, and not at all pretty, no nice notes in it at all.

He has a whitish crest of feathers streaked with black on the top of his head which he can erect or lower when he likes. His back is reddy-brown, the little patch of feathers just above his big glossy black tail is white. Underneath he is a lighter colour than his back. The large feathers or quills of his wings are glossy black, and the small wing or elbow feathers are black and bright blue; and he has a strong black beak.

He is about thirteen or fourteen inches long from the tip of his beak to the tip of his tail, and measures nearly two feet from one tip of the wing to the other when spread wide. So you see he is not at all a small bird.

You find Jay Bird in woods and coppices; he does

Jay Bird.

not like the open country at all, and if you walk through a wood and hear a noise something like this, Cha-ah-ah-ah-ah, you may be pretty certain that Jay Bird is somewhere near.

He is very shy and timid in his wild state, but if you take him very young and just about to fly from the nest, he will make a most amusing pet and become quite tame.

Mr. and Mrs. Jay Bird build their nest in the top of a large tree or in a very high thick bush, but, like their voices, their nest is ugly and clumsy, being built up of twigs and sticks, and lined with roots, and that does not sound as though it would be a very comfortable cradle for the baby Jay Birds. Sometimes, however, their nest is well made.

In their nest Mrs. Jay Bird lays five or six eggs, which are greyish whitey-green in colour, speckled all over with light brown.

His food consists of acorns and berries, which he finds in the woods. He also likes garden fruits and peas, and he also feels inclined very often to have a little meat to his dinner, and eats other poor little birds' eggs and babies, which seems to us very very cruel—does it not?

The reason Velveteens shoots him is that he will persist in eating the eggs of the partridge and pheasant, which is of course very wicked of him, for the Squire then has fewer partridges and pheasants to shoot; and we all like these two birds.

If Jay Birds were not quite so wicked in this particular way, they would not be killed so much, and then of course there would be more of them to look at, and they really are beautiful.

Just look at this picture of Jay Bird, and then you will see what a saucy, naughty, mischievous-looking bird he is.

When I was a boy I always wore in my cap the little blue piece of Jay Bird's wing; but that was of course when I was living in the country. I did not wear it when I came up to London, or people would have laughed at me and called after me "Hayseed!"

The little bright blue and black piece of wing I wore in my cap is much prized and used by fishing men when they make their flies with which they catch Mr. Sam Trout.

You look out of your bedroom window very early in the morning when the sun is just "up," and you will see several Jay Birds very busy at work on Farmer Blenkinsop's peas. You see, the big garden is very near the large wood where the Jay Birds live.

I used to sit at my bedroom window in the very early mornings with my usual Colt repeating rifle and shoot Jay Bird and his relations; but it was *very* early in the morning, and a *long* time before breakfast.

When you shoot him in the years to come, always keep the bright blue and black piece of wing.

Jay Bird's Nest.

"JACK BAKER."

This is a name which is given to a bird called the "Red Backed Shrike" in some parts of the country. Why "Jack Baker" I really do not know, but I will try and find out and tell you in the next book if I may.

Jack Baker is another of the perching birds, and belongs to the family Laniidæ, and when you see him in South Kensington Museum you will see this name on the case in which he sits, Lanius Collurio, and you will notice how stern and vicious he looks.

Jack Baker is what is called a migratory bird, and spends only a short time in the year with us.

Most of his time he spends in the hot Northern Africa; then in the spring he comes to our England to find a wife, and build his nest, and rear his young ones.

Mr. and Mrs. Jack Baker find a nice part of the country, and they do not leave it until they leave us altogether, later in the year; so if you see Mr. Jack Baker in one place one day, you will be sure to find him there the next.

The tree Jack Baker likes best is a big hawthorn. There he sits, high up on a twig, his little eyes wide open, watching, just like a scout does in an enemy's

country. He seems to know at once when danger is near him, and he is off like an arrow from a bow.

The most interesting thing about him is his larder, and if you go into the thicket and search round you may perhaps find one of his larders.

If, while you are walking through the thickets, and come across a thorn bush, and see on the thorns a few flies, beetles, caterpillars, bumble-bees, frogs, and birds, etc., you will at once know that it is one of Jack Baker's larders, for when he catches any insect he immediately sticks it on to a thorn to get quite ripe for eating on some future occasion.

I have frequently found one of these larders, and in fact have seen Jack Baker storing up insects in it.

He likes baby birds and field-mice.

Mr. and Mrs. Jack Baker build their nest in a hedge or bush, only a little distance from the ground; so close to the ground in fact that even *you* might easily see the colour of the eggs.

The nest is made of all kinds of dry sticks, and lined inside with hair to make it soft and warm and comfortable for the little ones when they are hatched out of the four or five eggs.

The eggs are curious and beautiful in colour, being a yellowy white marked with browny green and very light purple. The colours of the eggs vary very much, so *that* you must find out for yourself.

When the baby Jack Bakers can fly well, the

whole family think that it is time to leave us, and they are nearly the first of all the birds to go; and the reason they go is that they want to change their clothes for newer and better ones, which they do in the hot Northern Africa. If you go there some day you may make yourself known to Jack Baker, Esquire, and family.

You can even now see him and his family and larder in South Kensington Museum.

"ROOKY."

THIS is the name I used to call this large, dark bird, whose real name is Rook. He belongs to the CROW tribe or CORVIDÆ family, his real name being CORVUS FRUGILEGUS.

Everybody seems to call him "Crow," which is quite wrong, for crows are not very plentiful and rooks are all over the country; besides, there is a difference between them in size, shape and colour.

Farmers simply hate him like poison, because he destroys their crops; and I cannot say he does no damage at all, because he does, though not so much as people think. He is very fond of grubs and insects of all kinds.

Some of these grubs live on the roots of grass, and

wheat, and barley, and oats. They eat the roots and young shoots, and Rooky digs up these grubs, and of course when he digs up the grubs the poor bitten plant must come up out of the ground as well, and so the farmer thinks Rooky has done it all, and shoots him as often as he can, and hangs him up to a stick in a field to be an object lesson to his relations, who really do not take any notice, but go on just in the same old way.

Rookies live in large colonies in the tops of tall trees, and don't they make a noise in the mornings and evenings!

The trees round the Squire's big house are full of Rookies and their nests. Go and see for yourself.

Rooky's nest is made of twigs and sticks, and in this nest Mrs. Rooky lays four or five eggs, greenish in colour, blotched with greeny brown.

When their young ones are hatched, they soon begin to make just as much noise as their fathers and mothers.

When they are ready to fly from the nest, Farmer Blenkinsop invites some friends to what is called Rook shooting. Some bring big guns, some bring small-bore rifles, and the shooting begins. The young Rookies are sitting on the branches close to the nest and are easily shot by the men with the big guns, because their guns are loaded with a lot of little shots, so of course they can't help hitting them, for when the gun goes off the shots spread out like

this, and here you see a young Rooky with the shots all round him, something like this—

and he cannot escape being hit by a few of them.

When you are old enough to use firearms, you will not use a big gun for Rooky shooting, but a small-bore Colt rifle, which takes a bullet about this size—

and you have then to take a very careful aim to bring down a Rooky, only be sure and kill him properly, and try not to wound him only and thus cause him great pain.

I am very fond of Rook shooting, because the

young Rookies are very very nice in a great big pie, but old Rooky is not at all nice to eat.

It is very amusing to see a lot of Rookies following a man ploughing the fields, eating all the grubs which are turned up by the plough. It is a sight which should make farmers glad, but it does not seem to somehow, for they go on shooting Rooky whenever they can come across him.

Rooky stays with us all the year round.

Sometimes when they are building and mending up their nests, one naughty Rooky will steal some twigs from another's nest, and then all the other Rookies get together and make a lot of noise, talking and arguing, saying "Craw, craw, craw, craw" all the time, just as the lawyers and people do in the Law Courts. Then when they have talked a long time they set about punishing the thief by pecking him, and buffeting him, and killing him. So you see even Rookies do not like people who steal, even if it is only a little twig.

Rookies always live in the same colony, or rookery as it is called, year after year, and when the spring-time comes round they repair their old nests and make ready to lay their eggs.

They live very long lives, but how long I should not like to say.

If you remember, the rook was the parson at poor cock-robin's funeral, but he could only read one word, and that was "Craw, craw, craw, craw,"

which he said ever so many times; in fact I have not heard him say anything very different from "Craw!"

THE STARLING.

THE Starling is another of our beautiful birds, and belongs, like Rooky, to the perching birds, and the family STURNIDÆ. His name is STURNUS VULGARIS. In my county we call him "Steer".

His clothes are very beautifully coloured. Black with shot-green and blue, with whitey-brown tipped feathers.

Starlings are much more plentiful now-a-days than they were many years ago, and much more naughty to poor Farmer Blenkinsop. He hates them very much because they do so much damage, though of course they also do a great deal of good, for they eat up all kinds of harmful insects and their larvæ, which would eat and destroy the crops.

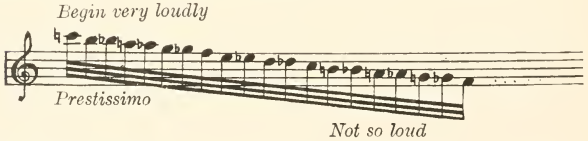
Fruit farmers also hate him, because he eats cherries, apples and pears.

Starlings fly in thousands to the orchards to eat all they can. Sometimes they suffer for their greediness, especially when they eat cherries, and I have now and then found a starling choked to death by a cherry sticking in his throat. So you see what greediness leads to.

He is timid and shy, and moves and flies very

quickly. He does not hop on both feet together like most birds, but walks just like you, and looks so pretty as he walks about with the bright sunshine flashing on his beautiful feathers, as he searches here and there for grubs and larvæ and insects in the grass roots.

The starling can sing very well, though not so well as Mr. Song Thrush, and he can be taught to talk if caught early enough. He is also quite an actor amongst the birds, being able to imitate their various notes and calls. He sometimes sings two or three of the thrush's notes. If you notice, some day when you see him singing with all his might as he sits on a chimney-pot, you will hear him sing notes which sound just like a stone-mason using a hammer and chisel. Another sound he makes is just like a stream of dried peas dropping from a distance on to a piece of board.

I have often been annoyed with him, because a few friends and I have a whistle which happens to be exactly like one of his favourites, a whistle that begins high up in the scale and runs down like this—

and frequently I have been made to look so silly by the starling answering me, when I whistled for one of my friends.

Mr. and Mrs. Starling begin to make their nest in April, in all sorts of funny places about houses and buildings, under the eaves of houses where the young ones may very often be easily caught, and in chimneys, and in rain-pipe heads; and when they build in rain-pipe heads, they always are the cause of trouble, for when a heavy shower of rain comes, the water cannot run away down the pipe. They often build under old rookies' nests, which seems very curious, doesn't it?

They make their nest out of quantities of dried grass, twigs, straw, and line it with lots of feathers; and in this nest Mrs. Starling lays five or six pretty light blue eggs.

When the young ones are hatched, the mother and father keep them well supplied with food, which consists of all kinds of larvæ and insects, and they grow very quickly, so that at the end of May they leave the nest, and the old ones set about rearing another nestful of young ones. They do not always, however, have two broods in a year.

In some parts of the country they go about in huge flights, which look like black clouds, and they could be shot in great numbers if you could get near enough to them.

A man once told me that one day he was out in the fields with his gun, and on going into another field he saw it was covered with starlings. He made a noise to make them rise, and then he blew

off both barrels of his gun at them, but strange to say, they all flew away. He went up to the place to see whether or no he could find one, and was surprised to see the grass covered with starlings' legs! He had shot them all off!!! I do not know whether he wished me to believe him, but I did not, for it was of course impossible—wasn't it?

Some country folk will tell you that you can make starlings talk by splitting their tongues with a "silver sixpence," but that is of course all nonsense, so don't you try it.

A great many Russian starlings have been coming to our England during late years, and they seem to be causing our own starlings to become more scarce. It is certain, however, that there are many more starlings to be seen now than there were a few years ago, and the Russian starlings are not so pretty as our own "Old Shiny Back".

Starlings are very good to eat when young, when cooked in a pie. I think I must shoot a few very soon, and have one made, and then I will invite you to take some, that is, if mother will allow you!

"PEE-E-E-E-WIT."

Have you ever heard this funny word cried in a high and sad sounding way? If you have, you will know that it is cried by a beautiful bird called the Lapwing, or Peewit. He is called lapwing because

he moves his wings slowly, though he can fly fast, and peewit, because that is the cry he makes as he flies slowly over the fields.

The peewit belongs to the PLOVER tribe, family CHARADRIIDÆ, and his name is VANELLUS CRISTATUS.

He is found on moorland, commons, plough land, and pasture land, and fallow land, flying low down.

Peewits make no nest, but Mrs. Peewit lays her eggs in any little hollow place surrounded by tufts of longish grass.

She lays four nice-sized eggs and sits very close on them.

It is not so very easy to find peewits' eggs, for they look so like the ground round about. If you walk across the field in nesting time and see Mrs. Lapwing suddenly fly from the ground, you must not imagine you will find her eggs on the spot from which she rose, for when she is disturbed, she runs a little way from her eggs, then rises and flies round and round above your head, crying her sad little "Pee-e-e-e-wit!" until you have gone away.

Many many years ago peewits were used as food, and even now they are sometimes eaten, and I should say they are very nice indeed.

But instead of eating them we eat their eggs, and hundreds of thousands of peewits' eggs are sold every year in England. They are rather expensive to buy, but if you live in the country you can find them for yourself, and they are much nicer to eat, because

they are fresher. Only you must take care that there are no baby peewits inside them!

The eggs are greeny-brown in colour, with plenty of spots and blotches of brown and black, so you can easily see that they must be very like little lumps of earth, and therefore not at all easy to find. You will soon, however, be able to find them when you have been a little while longer at the farm.

Peewit flies until very late at night, and I have heard his cry at nearly midnight. I say I heard his cry, because I could not see him, it was so dark.

When the little peewits are hatched, they do look so funny, like little balls of fluff on long legs.

If you go near the nest, the old birds fly into the air and round and round, while the young ones scamper away in all directions and hide themselves, and that seems to me to be a very good way of escaping their enemies.

I cannot tell you any more about the peewit just now, but some day, when I have studied his habits more, I will write to you again.

"QUICE."

This very likely seems a curious name to give to such a fine bird as the Wood Pigeon or Ring Dove, but it is the name I like best, because perhaps it is the name we use in our part of the country, Shropshire.

Mr. Quice is a noble and handsome-looking bird, and is larger than the tame pigeons which Farmer Blenkinsop keeps.

He belongs to the order COLUMBÆ, and his own name is COLUMBA PALUMBUS.

Mr. Quice is a most shy and timid bird, and it is difficult to get very near him, and that is what makes Farmer Blenkinsop annoyed. I will tell you why in a minute, so don't be impatient; I must first tell you about his nest and where he builds it and lives.

I cannot tell you much about Mr. and Mrs. Quice's nest, because there is not much to tell. It is made roughly and clumsily of twigs and sticks, with a few roots of plants to make a softer resting place for the eggs which are perfectly white, as white as the fleecy clouds on a summer morning.

Their nest is made in thick trees, holly bushes, and sometimes in hedges. I have often found their nests and taken their eggs, which are very nice when beaten up in a nice cup of hot coffee. You will think that I was very cruel to do this, but if you listen carefully to me, you will alter your opinion of me.

Now, I must tell you, Mr. Quice and his family connections are most destructive birds, and do an enormous lot of damage to the farmers' crops, and as the Quice family is growing larger and larger every year, the farmers are more keen than ever on killing them off; for they eat, and eat, and stuff, and stuff, until you think they would burst, and especially when

the turnips are well on. They eat and eat the nice juicy, tender tops of the turnips until they cannot possibly eat any more ; and do you know, the amount of turnip one Quice will eat is often enough for one man or woman to eat ! I have shot Quice many times, and found their crops so full of food that I could not help wondering how they could fly.

So it will seem that either they are very greedy birds, or they really require such a lot of food.

Though Quice are timid and shy as a rule, yet in the nesting season they seem to lose their shyness, and at this very moment, while I sit writing in my garden, Mrs. Quice is walking on the lawn not very far from me.

But far away in the country, I have waited and waited in a ditch under a hedge for Quice to come home to roost and been disappointed, for, at the least movement (and their eyesight and hearing are so keen) they wheel rapidly away and are gone before you can raise your gun and get a fair shot at them.

Still, those I have shot, and they have not been few, have made most jolly dinners.

Though the harm they do to the farmers' crops is great, they also do a great deal of good, for they eat the seeds of all kinds of plants that grow amongst the corn. This has been found out by opening their crops. I think, though, and I don't think I am very far wrong, that Mr. Quice and his relations do a little more harm than good.

If you are walking through a coppice and hear a loud clap, clap, clap, you will know at once that you have frightened Mr. Quice away from his perch on some tree.

When you are able to use a big gun with two barrels, you will perhaps go shooting Quice, and you will find that he is rather difficult to bring down, for his strong feathers act as a kind of armour, and unless you are within thirty yards or so you might not kill him dead; even at twenty-five yards he will sometimes get away.

You can see him at South Kensington Museum, and I can tell you he is not quite so innocent as he looks. You buy a farm when you are a man, and see whether I am "telling you truly".

"LONGTAIL."

"JOHNNY LONGTAIL" is the name given by shooting men to the Pheasant.

He is one of the most sought after birds we have in England. Men go miles and miles in trains to see him, and they always take their double-barrelled guns and bags of cartridges with them; and when they see him they at once kill him, and hang him in the larder for two weeks, and then cook and eat him! Longtail does not look forward to the month of October with any pleasure, for he knows that then

is the time that the guns begin to bang, bang, bang, and the little shots whistle all about him.

Longtail was not always an English bird, but came to us hundreds of years ago from South East Europe and part of Asia, and has stayed with us ever since.

He belongs to the family PHASIANIDÆ, his own name being PHASIANUS COLCHICUS.

Longtails live in woods, and coppices, and coverts, and Lady Longtail lays her eggs on the ground in a tuft of grass, ten or twelve of them, pale olive brown in colour. I think she might find a better place to lay them, for Mr. Stoat finds them and eats them all up.

If you ever find a clutch of Longtails' eggs you must never touch them, because they belong to the Squire, and Velveteens will be very angry with you, and bring you home to father, who will whip you! So, promise me you won't touch them?

Velveteens can tell you where each nest is, for it is his duty to find them and watch them for fear of poachers.

Now-a-days, though, Longtails are often kept just like ordinary fowls, and become of course quite tame, and then they lay nearly three times the number of eggs that they would if they were wild, running about the woods.

At night the Longtails roost in the lower branches of the trees, and this is the time the poachers find

them and knock them down with sticks, and pop them into sacks, and sell them to game dealers in towns.

Some of the dealers know perfectly well that the birds have been poached, or stolen, but they are so dishonest that they do not care a little bit, so they are of course quite as bad as the poachers themselves.

> He who takes what isn't his'n,
> When he's caught shall go to prison !

And this is what often happens to them.

Poachers go about three or four together, and there are often fearful fights with the Velveteens who watch all night long during the season, and sometimes some of the Velveteens are very badly hurt, and then of course the poachers are very severely punished by the law by being sent to prison for some years, where they have to do what they perhaps have never done in all their lives before—VERY HARD LABOUR. It serves them right, doesn't it?

You can understand now that it is not always nice to be a Velveteens !

Come with me along the lane a little way, to where the common joins the edge of the wood, and I will show you. Now look ! there you see four Longtails walking about in the grass. Now make a noise, and now where are they? They have not flown away, nor have they run away. They have just squatted down flat, making it almost impossible

for you to see them; in fact, you may walk within two or three yards of Longtail sometimes, and then not be able to see him! He sits quite motionless staring at you all the while with unwinking eye.

Shooters do not shoot him as he is walking, or sitting still, because it would be too easy, and they would soon grow tired of the sport; but they engage a lot of men, called beaters, who frighten the Longtails so that they fly out of the woods and spinneys, and the shooters shoot them while they fly away.

The dead Longtails are sold to the dealers in the towns, and then on the second day of October you may see Longtail and lots of his family connections hanging all over the game dealers' shops.

Now, I want you to do me a favour! When father goes shooting Longtails, will you ask him to send me a brace to my address? Thank you, very much. (A brace means two.)

"PERDY."

This is the Partridge, who is another game-bird; a cousin of Longtail, and belonging to the same family. He is much smaller, and has not a beautiful long tail like his cousin.

His museum name is Perdix Cinerea, though when he is at table with you he is called "Partridge

and Bread Sauce"! I have not quite made up my mind as to whether he is nicer running about the fields or at table with me; for you see I am so very fond of him both ways! When he is alive he is amusing and interesting, and when he is dead he is "One shilling and ninepence, please. Thank you, madam; shall I send it for you?"

In the very early spring-time Perdy looks for a wife, and he often has to fight, really fight very hard, for her, while the young lady sits quietly by watching the battle, and she marries the Perdy who beats the other, and they both then set about keeping house. They do not make much of a nest, only a few stray bits of grass stalks and dead leaves.

You may find their nests on the ground in the middle of corn and other fields, in hedge banks, and in them from eight to twenty eggs. Once, when I was a boy, I found in the hedge bottom by the roadside a nest with sixteen eggs; and I feel I must tell you the truth. I took them home, thinking my father would give me something for being so clever! He did give me something, a most beautifully made stiff birch, and I found chairs and forms were not at all nice to sit on for quite a little while afterwards!

The next day father gave me fifteen of the eggs, and said I might eat them (there was a funny look on his face as he said it), but I found they were all addled, which means they were bad! So no wonder there was a funny look on father's face, eh? Mrs.

Perdy must have forsaken them for quite a long time, for as I broke each one to see whether there might be a good one amongst them, the smell in the study was not at all like mother's lavender water!

When the young Perdies are hatched they can run immediately, and are soon left by their father and mother to fight their own battles; but if, while they are being fed and taken care of, you should go near to the nest, you will find that Mrs. Perdy will run a little way and flutter her wings just to entice you after her instead of her young ones. When she is sitting on the eggs she sits so closely that you may sometimes take her up in your hands, and if ever this happens to you, please put her back again and don't take her home, for if you do, you would have to go to prison, and that would be terrible!

Five or six Perdies going about together are called a "covey," though a covey very often numbers more than twenty Perdies. What a sight for the shooters on the 1st of September!

When disturbed they fly up with a tremendous whirr of wings, and go sailing off over the hedge, and swing slowly down on to the ground beyond with motionless curved wings.

Mr. Fox likes Perdy very much when he can catch him, and at night he creeps, and creeps, and creeps nearer to a "covey" until he thinks he is near enough, when, with a rush, he is on them, and

he generally manages to catch one in his sharp teeth before they can get properly "on the wing".

Men shoot Perdies in the same way as they do Longtails.

When you have your gun, and a gun license, and a game license, and go shooting Perdies, you must not shoot bang into the middle of a "covey" as it flies, but shoot at a bird on the outside. Don't forget this, for it is one of the principal rules of correct shooting manners.

"CHATTERMAG."

This is a name that perhaps mother gives you sometimes when you will persist in worrying her with all sorts of curious questions, and Sarah says, "Oh! you just run out of my way, you little mags, and don't werrit me with your nonsense!" They both mean that you are like a magpie, who when tame, chatters awfully.

The Magpie, or Chattermag as I shall call him, is a sort of cousin to Rooky, belongs to the same family, and is called Pica Caudata.

His colours are black and white; white on his chest and upper parts of his wings, and black everywhere else; so he is easily seen.

Not only is Chattermag found in England, Ireland and Scotland, but he may be found in other countries,

from England to China and Japan, and even in some parts of America.

Mr. and Mrs. Chattermag make a most curious nest of twigs and sticks, which they plaster with mud, and line with hair. Then they build a sort of roof over it.

The nest is built in trees, and high bushes in the middle of large fields ; there is no mistaking it, and you cannot fail to see it ; but if you think you can get the eggs easily, you are mistaken, for you will get scratched by the thorns on the roof and nest itself. If you really want an egg for your collection, you will not mind a few scratches, even though a little blood comes, for many boys suffer lots of bruises, scratches and sprains in order to learn all about birds, and their eggs, and habits.

Chattermags feed on some insects, birds' eggs, small birds, and dead animals ; so you can imagine from that, that he is not quite good to eat.

You never see many Chattermags together. You see him more often by himself, or two of them, sometimes three of them, rarely four, though once I remember seeing seven Chattermags together !

Chattermag, when taken young, can be made into quite an amusing pet. He may be taught to talk, but he is always a thief, and will steal all kinds of small articles, and hide them away. I am sure I cannot tell why he does so ; I cannot make out. He would take pencils, pens, thimbles—oh ! all kinds of

things; so if ever Velveteens gives you a young Chattermag, and tells you how to feed him, you must keep him in a large cage all by himself, and he then cannot steal anything.

Then you must teach him to talk, and this perhaps you will find a little hard; but never mind, stick to your guns, and say to him some such saying as this, "Good morning, Jack," about twenty times straight off, every day, and he will soon begin to try and imitate you.

When he has mastered that, say something else to him, and you will be quite surprised at the way he will say things.

Mrs. Chattermag lays about six eggs, which are very pale blue in colour and spotted all over with grey and greeny brown.

If you walk down the village street you will see, hanging over the doorway of Widow Wilkins' little shop, a wicker cage, and in it a Chattermag, and to every little boy and girl he says, "What do you want?" several times, and if you are thinking only of the nice sweets and chocolates you will presently buy, you will be quite startled perhaps!

I should not advise you to get a wicker cage like that, because it is not nearly large enough; there is scarcely room enough to turn round in, and how would you like being kept in a small cage with not enough room to move in? Not much, I think!

THE CUCKOO.

The cuckoo is a pretty bird,
He sings as he flies,
He brings good tidings,
And tell us no lies.

He sucks pretty little birds' eggs to make his voice clear,
And sings unto us but four months in the year.

This is what the children in the village schools sang many years ago. I do not know whether they do so now or not. Of course the cuckoo sings when he is perching on a branch as well as when he is flying; but I suppose that would have made the verse too long, or perhaps the "poet" could not make "perching" fit into the line, and so he left it out.

The cuckoo is a PICARIAN bird, and belongs to the CUCULIDÆ family, and his name is CUCULUS CANORUS.

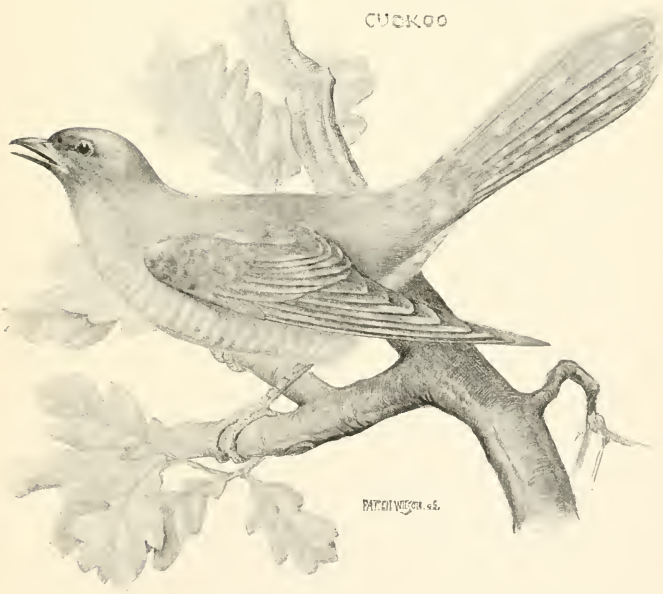
The cuckoo is a most curious kind of bird, and we do not know all about him even now.

People sometimes think he is a hawk like the kestrel, but of course he is not a hawk, because he does not belong to the same order.

He comes to us generally in April, and goes away at end of July or the very beginning of August. This is another little "poetry thing" that the village children sang many years ago:—

In April
He opens his bill, [beak]
In May
He sings all day,
In June
He alters his tune,
In July
He begins to fly, [go away]
In August
Go he must.

It is all quite true, too!



He begins to sing a little in the month of April, and in May his voice gets very strong and sweet, and

he really does sing *all* day, and even far into the night; in fact, I have heard him at ten, and eleven, and twelve o'clock at night. In June his song is a little longer, and not so pretty as his May notes; perhaps it is because he knows he has to leave us soon. In July he is not to be heard nearly so much, and in August he flies right away altogether, and does not come back till the following spring.

One funny thing about the cuckoo is this, he does not make a nest, because I suppose he would not go to the Bird School in the Beginning of the World to learn. He must have "played truant!"

As cuckoos have no nest of their own, Mrs. Cuckoo places her eggs in the nests of other birds, such as hedge-sparrow's, wagtail's, fly-catcher's, reed-bunting's, meadow pipit's, and others. She places only one in each nest. No one knows exactly how many eggs she lays in a season; some say ten, some say twenty or more, and there does not seem any way of finding out.

Another curious thing is, that the egg she lays in any particular nest resembles the egg of the bird that built it.

Though the cuckoo is a rather large bird (bigger than a blackbird), the egg is smaller than you would think; it is only very little bigger than the egg of the hedge-sparrow.

It is generally supposed, and I think quite properly, that Mrs. Cuckoo lays her eggs on the ground or

some other good place, and then she takes it up in her beak and places it in a nest she has already found.

I do not think that birds can be able to count, or they would at once turn out the cuckoo's eggs; but instead they sit on the eggs as they always did, and hatch the young ones out.

When the young ones in the nest are hatched, young Mr. Cuckoo is bigger and more hungry than the others, and pushes his great big mouth up to receive the food the father and mother birds bring, and he gets quite the biggest share.

He is not satisfied with being so greedy, but he pushes the other poor young birds out of their own nest! Then of course they die, because they are not old enough to find food for themselves, and they have no nice warm mother's breast to nestle to and be kept nice and warm.

I wonder what the little birds' father and mother think about this wicked behaviour!

In order to push his poor little foster brothers out of the nest, he gets under them, and when they are right on the top of his back, he jerks them out.

What annoys me about it, is the fact that he is not a bit sorry for what he has done. But I suppose we must not be annoyed, because it is the "way of Nature," and what Mother Nature tells animals, birds, reptiles and insects to do, that they are bound to do; but all the same, I cannot help thinking of those poor little birds.

The cuckoo feeds on all kinds of insects; but if you ever hear any one say that cuckoos eat other birds' eggs, you must say, "No, he does not!"

People say that they eat eggs, because sometimes when cuckoos are shot, pieces of egg-shell and the yolk are found in their mouths; but it was found out that they were carrying their own eggs in their beaks to place them in other birds' nests!!!

"SWEET SINGER."

Indeed, "Sweet Singer" is the most delightful songster in England. I call him "Sweet Singer," but he is known as the Nightingale. He is a perching bird and a member of the Warbler family, and his name is Erythacus Luscinia.

He comes to us early in April from Africa, where he spends the winter time in the warm sun. I wish he would stay with us all the year round, and sing his sweet song all day long. We must be glad and thankful that we hear him at all, for there are many people who have never heard him sing, and I am very sorry for them, for they have missed a great treat.

Sweet Singer is beloved by people who write poetry. They write verse on verse about him, and how his song makes them feel happy, and how the world seems dreary and gloomy when he has left us.

Sweet Singer is not to be found everywhere in Eng-

land; he does not seem to care for the country further north than Yorkshire, and even in that county he is not often heard. In parts of Middlesex he is heard a great deal, and also in Kent, and in other counties more or less frequently.

The nest Mr. and Mrs. Sweet Singer build is made of grass and straw, leaves and twigs, and to look at it you would not think that such a beautiful singer could make such an untidy nest.

It is built in a thick bush or tall hedge, and in tall thorn bushes, and is very difficult to find.

While his little wife is laying her eggs he sings continually. I cannot describe his song; I shall not attempt it. It is too beautiful and sweet, and to know it properly you must go to the end of the lane where there is the long spinney, just after seven o'clock, and listen, and you will hear it for yourself, which is much better than having it described to you.

Sweet Singer sings for a long time after you are in bed and fast asleep.

I have heard him singing in a cage outside of a cottage near a wood, but he did not sing nearly so well as when he was free.

Now I daresay you will think that as Sweet Singer sings such a sweet song, he will be just as beautiful to look at; but when you see him you will be disappointed, for he has no pretty colours with which to catch your eye; instead, he is rusty brown on his

upper parts and greyish on the under parts, but what he lacks in beauty of colouring he makes up for in beauty of form.

"Beauty has not always a sweet voice."

When Mrs. Sweet Singer has laid all her eggs, Mr. Sweet Singer does not sing quite so much; and when the young ones are hatched he does not sing any more that season.

REPTILES.

Now I will try and tell you something about the Snakes and other animals of the REPTILE order you may see on the farm.

THE BLINDWORM.

THE first I shall tell you about is the common Blindworm.

Though he looks like a snake, he is not a snake, he is in reality a lizard; but if you saw a lizard and a blindworm together on the table, you would wonder why I say so, for a lizard has four legs and the blindworm has none. Nevertheless he *is* a lizard.

When his skin is taken off, you may just see the small beginnings of legs, which do not show through his skin.

He is from ten to fifteen inches long, and half of

that is tail; but if you can tell where his tail begins, you will be very clever.

His head is short and small, and there is very little difference in size between his neck and the rest of his body. His tail end is not sharp like those of many other snakes, but blunt, and he is covered all over with scales like a fish.

His back is browny, and his under side dark grey.

You can find several if you go up on to the common at the back of the farm, amongst the heath and grass tufts; and don't be afraid to take him up, for he will not bite you, he is too gentle. Even if he did bite you it would not hurt you.

He is sometimes called "Slow-worm," but I can tell you that he is not very slow.

If you come upon him suddenly, and in your fear that he will escape you, you handle him roughly, very likely part of his tail will drop right off! and that is why Professors of Natural History call him ANGUIS FRAGILIS, of the ANGUIDÆ family.

Ignorant people in the country always kill every blindworm they come across, because they say he is venomous, and that you would die if he were to bite you. I have seen village boys come home with several, all dead!

Blindworms live, during the latter part of the autumn and the winter, deep under the roots of the bushy shrubs on the commons or under leaves, where they sleep until spring comes round again.

If you ever have a blindworm or two as pets, give them slugs, all kinds of insects, grubs and worms.

Father would like to see lots of blindworms in the garden, because they would do so much good by eating up so many of the nasty little slugs and insects that eat up the young plants.

Mrs. Blindworm has eggs which are hatched inside her, and when the little ones come into the world, they are like little rods of silver, and very lively they are too!

Blindworms have little black, forked tongues, and these the country people will tell you are stings! Just fancy! stings, indeed! Only some insects have stings, and they are in their tails, and not in their heads!

In the churchyard of the little village of Stanmore, in Middlesex, some years ago, I found blindworms very often on Sunday afternoons in the summer, and took them home and put them in the garden, but they always went away again, or perhaps Prickles ate them all up. I should not be surprised! Would you?

Now, be careful when you find a snake; look well to see if it is our old friend the blindworm, and if so take him home with you in your pocket and make a pet of him; and then one of these days I will come and paint his portrait for you to put in your Scrap Book!

Shall I?

"FANGS."

"FANGS" is a snake, beautiful but venomous, not at all gentle and harmless like the blindworm; and when you see him you must be careful not to go too near him till you are old enough, or you may get bitten, and you will be very ill through his bite.

He belongs to the VIPERIDÆ family, and is named VIPERA VERUS. His English names are Viper and Adder, and he is the only venomous reptile we have in England. How happy we should feel knowing there are so few in England, when in the hot climates there are many kinds of venomous snakes, big ones and little ones.

Fangs is about twelve inches long as a rule, but sometimes only ten; then, again, I had one only the other day which was seventeen and a half inches long! which is a very good size indeed.

Fangs' relations are not always coloured alike, but I think the general colour is a dirty yellow-brown, with a thick line of black zigzag all the way down his back from head to tail, and a row of black spots along the sides. His nose is black, and on his head is a V-shaped mark.

So you will have no difficulty whatever in knowing a member of Fangs family when you see one. ALWAYS LOOK FOR THE ZIGZAG MARK DOWN HIS BACK!

His eye is vicious looking and bad tempered; and when you suddenly come up to him, he raises his head and hisses at you, as much as to say, "Don't touch me, or you will be very sorry for yourself!" So of course you don't go any nearer to him.

You find him on commons, plantations and rocky places basking in the sun, for though his blood is cold, and not nice and warm like yours, he likes warmth.

The blood of all reptiles is cold.

He likes water sometimes, and can swim across small streams quite easily. A friend of mine who was once fishing on the banks of a river saw Fangs come across the water and up the bank quite close to him, so close indeed that he could have touched him.

It must be rather startling to see a venomous snake swimming toward you! Mustn't it?

Fangs will not hurt you if you don't worry or annoy him; he is only too keen to get away from you. That is why he hisses at you.

Many years ago people thought that snakes moved over the ground like this—

and in old books of Natural History they always show them like this. It is quite wrong, however, because it is quite impossible for them to get along in this way, because the fitting together of the joints

of their backbones would not allow this movement. So, instead, they move along flat on the ground by means of the large side to side scales on the under sides of their long bodies.

These old books on Natural History are interesting and amusing to read, though there are many mistakes in them, and the drawings are so very very funny.

In the School Library of my first school there was a long shelf of these small leather bound and backed Natural History books, which I have read many times. The authors gave some of the animals such funny names, names you would not know now-a-days; and they wrote about creatures that never were on the earth, nor ever could possibly be, and gave drawings of them as well!

Some day I may tell you about these funny animals, and what they did, and what they looked like; but that won't be for some time.

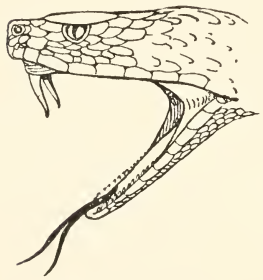
In the New Forest, in Hampshire, there lived a most interesting old man named "Brusher" Mills, who did nothing but catch Fangs and his family connections. He caught thousands of them, and boiled them down to get their fat, which he sold as an ointment for pains.

He lived all alone in a little hut, and roamed all over the forest, and could tell you lots about all the animals and insects he saw while he was hunting Fangs.

The poor old man is dead now, and I fancy Fangs is glad.

For some reason or other, he had to leave his hut, and perhaps that made him unhappy and miserable, and so he died.

Fangs has a large mouth, and *his* mouth does stretch from ear to ear! Here you see a drawing of his mouth wide open, showing the two long teeth which cause him to be called Fangs.



These teeth or fangs have each a bag or gland of poison attached to it, and when he bites or "strikes," as it is called, a little drop of poison is squeezed from the gland down the teeth into the tiny prick made by them.

When Fangs sees any little animal or frog, he crawls up to it and "strikes" it with these two teeth, and of course the poison soon kills it (he does not like swallowing live animals); then he begins to swallow it, and this takes some time.

After feeding he becomes drowsy and sleepy, and is much more easily caught.

If Fangs were to bite you on the hand with his two sharp little teeth, your hand and arm would swell up and become very very painful indeed; but in a few days you would be well again, and none the worse for it.

If you had been ill at home, with Doctor Curemquick coming to see you every day, and had been sent to the country to get strong again, and Fangs had bitten you, you might be very ill indeed, and even die, and then what would father and mother do?

When you look at the drawing of Fangs' wide-open mouth, I daresay you will wonder how he can shut it without hurting himself with his teeth; so I must tell you that these two teeth work on a kind of hinge, and when he closes his mouth he pulls them up, and they lie against the roof of his mouth, and pointing backwards.

He has a forked tongue, as indeed have all other snakes. His is quite black and shiny.

I used to hunt Fangs during my summer holidays and half-holidays, in company with some boy friends. This is how we went about it:—

We cut forked sticks three feet long, with the forks about an inch and a half long, and also short strong switches. These were our only weapons.

When one of us found Fangs asleep on a bank in the warm sun, he quietly and quickly jabbed the forked end of his stick over his back, while another of us struck Fangs a smart cut, which killed him. Don't you ever attempt to catch Fangs at all unless you have some one with you who understands catching him, or you will perhaps get bitten. The best plan is, leave him severely alone, and let some one

else do the catching, until you are old enough to do it for yourself.

I do hope father will not be angry with me for telling you how we boys caught Fangs—I do, indeed!

I must remind you of one little thing—DO NOT FORGET THE ZIGZAG BLACK MARKING DOWN FANGS' BACK!

"RINGS."

"RINGS" is a very harmless snake, though he is much longer than Fangs. He has no poison teeth at all. The very sight of him is enough to frighten people, because of his length, which is more than three feet; so you may quite imagine how scared you would be. I remember once seeing Rings when I was not more than eight or ten years of age, and I ran, and ran, and ran away home as fast as I could, for I thought he would run after me! If I had only known how harmless he was, I should have stayed near him to watch and see what he did, how he moved, and how he caught and ate his food.

Rings belongs to the COLUBRIDÆ family of snakes, and has the name TROPIDONOTUS NATRIX.

He is often kept as a pet; but when you first catch him and take him home to make a pet of him, he may possibly bite you; but you must not mind that, for he is not a venomous reptile, but take him home and try and make a pet of him. When he is handled,

however, and before he is used to you, he emits a most horrid and disgusting odour, and in a few minutes the room in which he is smells horrid, and if father were to come in and smell it without knowing the cause, he might send for the Sanitary Inspector, thinking there might be something wrong with the drains!

If you succeed in making a pet of him, that nasty smell will not happen while he knows those of your family around him; but if a stranger were to come in and touch him, the same nasty smell would come out of his cage or box!

You, no doubt, wonder why he emits this odour. It is his only weapon of defence, and he uses it on many occasions to save his life, just as you would use your fists in defending yourself.

There are several animals, birds, insects and reptiles that use the same kind of defence.

Rings swims very well indeed, and so he must, for he sometimes has a fish dinner or supper.

He may often be seen swimming with only his head and part of his neck out of the water.

His food consists of mice, fish, small birds and other small animals, which he swallows whole without chewing! Fancy that! Rings is very fond of eggs, which he swallows without breaking the shell, and when he has got an egg down far enough he draws his sides inwards, or rather, contracts the muscles of his stomach, which breaks the egg, and

the white and the yolk go into his stomach, and he throws up the smashed and empty shell.

Rings puts on a new coat two or three times a year. Just before he does so, he does not look half so pretty as he did, but becomes kind of miserable, poor thing. Presently, when he is just about as miserable as he can be, his old coat or skin opens at the neck, and he glides along amongst twigs, through hedges and brushwood. This causes his old skin to be rolled back and back until it comes off at his tail end, turned inside out.

Even his eye peels, and the eye-scale looks like a small pane of dull glass.

Now, when his old skin has gone, he looks beautiful in his new clothes; and down he goes to the pool and has a swim, and comes out looking more beautiful than ever!

All snakes change their clothes in this way.

After the change, Rings is very hungry, and immediately goes on the hunt for dinner, which he finds close to or in the very pool in which he took his bath. And what do you think he catches for his dinner? A frog! Poor Froggie! As soon as Froggie knows that Rings is after him, he becomes so frightened that he sits quite still, and quite unable to move an inch for very fright!

It is soon over, and Froggie is in Rings' "Red Lane"!

It is said that sometimes Froggie has been heard

to croak once or twice after he has been swallowed! I have not heard it, and I don't much wish to, because it would make me so sorry for the poor little chap.

I was told some time ago, that once Rings caught and swallowed a Mr. Water Rat, and of course any self-respecting Mr. Water Rat would not feel at all proud of being in such a cold-blooded reptile as Rings; so after being swallowed, this very particular same Mr. Water Rat set to work to eat his way through and out of Rings' body, which he soon did, and was only too thankful to be out of such a nasty prison. Rings, of course, died, and Mr. Water Rat immediately went into the stream and swam, and swam, to wash himself clean again—and I should think so too; wouldn't you?

Mrs. Rings lays from twelve to twenty eggs, all fastened together, and they are hatched by the warm sun.

These eggs are sometimes found on manure and rubbish heaps. Mrs. Rings lays them there, because the decaying heaps make warmth, and help the hatching of the eggs.

I don't think the eggs are good to eat, so I should not try if I were you. I don't suppose they are very nice in flavour!

"SLOWCOACH."

WHAT an unfortunate reptile is the poor Tortoise to have such a name given to him. Some little children who are slow at learning, or doing lessons, are called "slowcoaches".

The poor tortoise cannot help it, because he was hatched like it, and Nature meant him to be a "slowcoach"; so he cannot be blamed, but boys and girls *can* help it, if they *wish*.

Don't think I am "preaching" to you; I am only pointing out the difference between slowcoach tortoise and slowcoach boys and girls.

Our Old Slowcoach is a reptile; you may not think so, but it is quite true though. When I was a little boy I thought all reptiles were long things, and soft and slimy; but when I began to read books, and see the creatures for myself, I found out how, in the REPTILIAN ORDER of creatures, the shapes and colours vary.

Old Slowcoach belongs to the TESTUDINIDÆ family of the order CHELONIA, and his name is TESTUDO GRÆCA.

He comes originally from a country called Greece, not bacon grease, nor candle grease, nor bears' grease, nor axle grease, but plain Greece.

In London streets you may often see cart-loads of Slowcoaches waving their little legs in the air, and the men sell them for fourpence, fivepence, sixpence,

sevenpence, eightpence, ninepence, up to a shilling or more, sometimes five shillings; and, I can tell you, Old Slowcoach is only too glad when he sees one of you kiddies going to buy him to put in father's garden! He knows that he will have quite a happy life—lettuce leaves, and cabbage leaves, a little fruit, and sometimes a few slugs and worms to eat.

You can imagine what a difference it is to him after being in the nasty smelly hold of a ship, and a jolting cart along the streets, to come into a nice garden where there is plenty of shade, and food, and a beautiful bath when he wants one.

He likes a bath now and then, though he can't bear rain, and when a shower comes along, off he runs and hides himself somewhere out of the way.

He likes to be out in the glaring sunshine, no matter how hot it is, and while you are fanning yourselves with your hats, he is quietly laughing round his elbow, and thinking what funny things men-and-women and boy-and-girl people are!

If you suddenly come upon him and startle him, he draws his head and legs into his hard shell, and in this position he remains until you have gone away again.

When Old Slowcoach feels that the winter time is coming, he buries himself in the earth, where he lies all through the cold weather, sleeping hard! Then when beautiful spring comes, he pops out of his burrow again.

Mrs. Slowcoach lays about ten eggs, sometimes more and sometimes less. They are about the size of small nuts; and the little Slowcoaches are such funny-looking little chaps, only about an inch long! but just like the Old Slowcoach mother.

That beautiful bent comb with the long teeth which mother wears in her hair at the back of her head is made of the back plates of Old Slowcoach, but not of our Slowcoach, because his back plates are much too thin to make combs of.

The hair combs are made out of the back plates of the very big Old Slowcoaches that live in the very hottest parts of the world, thousands of miles away across the sea.

If you were to see one of these back plates before it went into the factory, you would not think that anything so beautiful as mother's shell comb could possibly be made out of it, for it is quite rough and dirty looking; but polishing and cutting make quite a different thing of it as you may see.

Old Slowcoach, when he is a full-grown man Slowcoach, is about one foot long, and his hard humpy back is called his carapace.

I have told you a little about Old Slowcoach because I know Farmer Blenkinsop has two full-grown ones. I really should not have told you, because he is not one of our *own* animals, but is brought over in ship-loads from Greece; but it is just as well you should know a little about him. Don't you think so?

"CROAKER."

I call Frog by this name, because he croaks as he sits in the shallow parts of the pond just down the lane; and it is a funny noise, quite a big noise, when lots of Croakers are croaking together.

Croaker belongs to the class AMPHIBIA, order ECAUDATA, and family RANIDÆ, and his own name is RANA TEMPORARIA.

He is always to be found in large numbers in ponds and pools, all members of a very happy family, and some day in the spring-time you may hear their evening concerts.

It is very nice to go to these concerts once or twice, but the worst of it is, they all sing the same song every time. They only have one song, and that is "Croak, Croak, Croak," and this song they sing for hours.

In early spring Mrs. Croaker lays lots, and lots, and lots of eggs which you may see in masses floating on the top of the water; and they are hatched by the warm sun.

You never saw such funny little things as the baby Croakers; not a bit like their fathers and mothers, but more like funny little fishes. They have no arms or legs, and are called tadpoles, and breathe through gills, like fishes, while their parents breathe through lungs, like we do.

They go through several changes during this part of their water life.

First, they look something like very wee carrots,

"CROAKER"

all tied up in bunches to the weeds that grow in the water.

Presently they unfasten themselves from the weeds, and wriggle about in the pond enjoying themselves. I

suppose they call that wriggling swimming, though they have only their tails to help them through the water.

In a very little while the tadpoles grow two little legs, one on each side of the tail where it joins their funny little fat bodies, and then they use these legs to help them to swim much better than they did before. All this time they are growing and growing, and presently two more legs grow out, one on each side of the upper part of their bodies just below their necks, and then they can crawl and creep quite nicely.

In another little while their tails become smaller and smaller, until there is only a very little left. The tails they first had, had no bones in them, but were only muscle.

When they are a little older, and are very small editions of father and mother Croaker, they leave the pond and swarm across the roads and fields in thousands, and sometimes it is impossible to walk in some places without treading on many of them. Of course it is their own fault if they get trodden upon and killed, though they know no better. They only know that it is time for them to come out of their watery home, and learn to live on dry land.

They are very pretty little chaps, these little yellow Croakers, and so merry looking and so sharp.

The little tadpoles sometimes cover the whole surface of the pond, which looks quite black with

them, and all shivery-shakey with their wrigglings. Then is the time that some of the fishes have good dinners, and the larvæ of Mr. Water Beetle and Mr. Dragon Fly and Mr. and Mrs. Newt enjoy themselves by eating the poor little chaps.

Even you can scoop up handfuls or even bucketfuls of them.

Croaker eats worms, slugs, beetles, flies, snails and other insects he can find.

It is very funny to see him catch a fly or beetle. His tongue is very curious, and it is with this alone that he catches his food.

He creeps up to the fly until he is within striking distance, then like lightning he darts out his tongue at the beetle, who sticks to the tip of it by means of the sticky stuff with which it is covered. The beetle vanishes down the wide throat, and Croaker blinks one bright eye, then the other, and looks very pleased with himself. His appetite is very good indeed, and you will be surprised when you count how many grubs and insects he can eat in a day.

Mr. Jack Heron very often pays Croaker Pond a visit, because he is very fond of Croaker for supper; so indeed are Fangs and Rings, and Mr. Stoat and Mr. Weasel, and Mr. Fox and Old Man Otter, and one or two other animals; and Mr. John Pike, the big long fish, does not object to him; in fact, some cruel men who fish for John Pike, use Croaker as a live bait on their hooks.

One particular kind of Croaker is very good to eat; he lives in England and France. But there is not much meat on his body; so the people who eat him only use his hind-quarters, which, when cooked, as only the French people can cook, are delicious eating.

It is a very amusing sight to see a lot of French men and boys fishing for Croakers on the banks of the canals, with little rods and lines baited with bits of red flannel!

It must seem funny to fish for Croakers! but if we were as fond of cooked Croakers' legs as they are, I do not suppose we should think it at all funny, and we should be very much annoyed if any one laughed at us!

Croaker's head is large, and his eyes also large, and very beautiful to see, and his body is browny yellow with dull brown mottlings over it. His hind-legs are long and very muscular. And just look at his long webbed feet; these he swims with, for his hands are not webbed, but small, and so are his arms.

Croaker buries himself when he knows that winter is coming, and there he lies until the spring, when he comes out as hungry as a hunter; but he has to do without beetles and flies for a little while at least.

THE NEWT.

In the same pond where you learned about Croaker, you will find this beautiful little creature. Harmless, did you say? Yes, perfectly harmless, but wet and cold.

He is another Amphibian, and is proud of his name, Molge Vulgaris.

In form, he is something like the lizard, but he

lives in the water and the lizard does not. He is about three or three and a half inches long, with four little legs and feet, a most intelligent little head and face, a broad tail, and a beautiful waving crest all the way down from the back of his head to the tip of his tail. His colour is also pretty, being brownish on his upper parts with large dots darker in colour, black spotted yellow tummy. Mr. Newt's tummy spots are larger than those of Mrs. Newt's.

Some kinds of Mr. and Mrs. Newts are quite differently coloured. I have seen three or four differently coloured newts in one pond.

In the old brickfield some distance away from the farm you will find hundreds of newts, at least I think so, and I hope so. The places to look for them are the pits where the men used to dig the clay to make bricks. These places are generally full of water, and abound with plenty of water insects and their larvæ as well as newts.

Newt begins his life in exactly the same way as Croaker. First the egg, then the tadpole, and the perfect newt to follow, except of course Newt does not lose his tail, and tadpole Croaker does.

Newts look very pretty and amusing in an aquarium, which is a place where live fishes are kept, as well as other water creatures.

Newt has enemies; one is the great big water beetle, who catches him and eats him; but Mr. Water Beetle has to be very quick to catch him, because Newt is very quick too.

Some of the old country folk are quite frightened if you show them a newt; they would not pick one up for all the money you could give them! Isn't that silly? The pretty little chap would not hurt any one even if he could; besides he never attempts to bite anything except his food; so in that respect he is just like you!

I am sorry to say I have seen country boys catch

and kill newts, just because they did not like them, I suppose. These boys are the same bad boys with the catapults who kill harmless animals and birds, and do other many cruel things to little creatures and insects.

Mrs. Newt lays her eggs on the leaves of water plants, where they remain by reason of the sticky stuff which covers them. These soon hatch, and swim about, slowly of course, because they are such little babies. They soon become stronger and bigger, and before the winter comes they are perfect little newts.

When Newt's clothes are old, or too small, he changes them a bit at a time; and while in this condition he looks very funny, with little bits of flaky stuff hanging to him.

Newt has no gills, like fish, with which to breathe, so of course he cannot live in the water without often coming up to the top to suck in a little air. Fishes get the air they breathe by taking the water in at their mouth and passing it through their gills, the openings at the back of their cheeks. Newt has lungs, and of course has to breathe the open air, or he would die.

When he thinks that it is time he had another mouthful of fresh air, he leaves the lower depths of the pool and rises up straight, as though he were standing on his tail, sucks in the air, and down he goes again, head first this time.

You can imagine how beautiful he must look as he comes slowly up in his pretty colours from the dark water up to the sunlight.

Just excuse me a minute, please? Thank you! My little son has just brought me a jar containing four nice lively newts, so I must at once put them into the aquarium. Good-bye!

"TOADY."

TOAD-IN-THE-HOLE, if you have ever tasted it, is very nice indeed, but Toad-in-a-hole-in-the-garden you could not possibly eat!

"Toady" is a cousin of Croaker, but belongs to the BUFONIDÆ family.

He is not nearly so beautiful as his cousin, but looks like a lump of earth with two beautiful eyes in it; so if ever you see anything like this description, you will at once know it is the gardener's friend, Toady.

The next time you see him, just take a long look at his eye, and I think you will think to yourself, "Why is not the rest of his body as beautiful?" and when you think that, remember that beautiful shapes do not always go with usefulness, and that beauty is only skin deep, and that handsome is as handsome does. Another thing you must think, and that is, perhaps Toady would not like to be beautiful.

He is quite happy as he is, and from what I happen to know of the dear old chap, he is quite a PHILOSOPHER. Ask father what a "fillossofer" is! and then you will quite agree with me.

But really I cannot help thinking what a funny, slow, dear old ugly chap he is. I am very fond of Old Toady, much more fond of him than I am of Croaker!

He is a

Come day—
Go day—
Heaven send
Sunday

sort of chap.

Toady has his beginnings in a very similar manner to Croaker's and Newt's.

Mrs. Toady lays her eggs in the water, all fastened together in strings, two or three feet long!

Then the tadpole; then the small Toady; and then the perfect Toady leaves the water for the land.

In colour he is a dull brown, just the colour of the ground, with warts and bumps all over his back, and underneath he is greyish with lots of little black spots on it.

He does not like the water so much as his cousin Croaker, but lives always on land, so of course his hind feet are not webbed in the same manner.

His movements are very slow, and he crawls along amongst the plants as he hunts for his dinner, and tea, and supper; though if you were to come suddenly

upon him and startle him, he would very clumsily do a sort of hop in such a very very tired kind of way.

From the warts and bumps on his back when he is handled there oozes a kind of liquid which is not nice to feel if you have not felt it before and become used to it. It is his only means of defending himself.

Now I must tell you this. Poor old harmless Toady has been, for hundreds and hundreds of years, most fearfully hated by everyone, because of this liquid which oozes from his warts. He was killed whenever he was seen; and once when I was just old enough to take notice of things, I distinctly remember an old servant of ours take up Toady with the fire-tongs, and actually put him ON THE FIRE!!! Just think of that! I was much too young to know how wicked and silly it was, but when I grew older I felt so sorry that people could be so silly. Even now when I think of it I quite shudder!!

Country people have told me that they have seen him SPIT FIRE! and in some old pictures of witches and conjurors in their "conjuring rooms," you always see two or three frightful-looking Toadies.

They have told me that if a dog touches Toady he will go mad! NOW ALL THIS IS SILLY NONSENSE! Remember that!

I have picked up hundreds of Toady's family connections, and have never suffered any hurt, not even the slightest irritation of the skin.

Doesn't it make you laugh to think of a cold-blooded

reptile like dear old Toady spitting fire ! making dogs mad !

Now-a-days we have no patience with such silliness.

More years ago than I can tell you, a man said that there was a jewel in every Toady's head, and how many poor little chaps were killed by people who had more time than brains, and wanted the jewel, I don't know ! I daresay a great many. Of course the man meant that Toady's eye was the jewel, because it is so beautiful.

Toady's food consists of flies, beetles, worms and all kinds of insects, and he takes them down the " Red Lane " in just the same manner as does Croaker, by means of his tongue, and when he snaps up a nice big bluebottle fly or any other fly or insect, you can hear a click, but cannot possibly see his tongue go out and in. You may see his mouth shut, and that is about all you can see.

I suppose the fly thinks that Old Toady is a piece of stone and has no fear, for when he settles on a leaf Toady sees him, and sits with his head on one side waiting for the fly to move a little, just to show he is alive. This is Toady's chance, and the fly can fly no more, but is safely in Toady's " Red Lane " !

You can easily catch Old Toady in Farmer Blenkinsop's garden, and put him in a deep box covered at the bottom with earth, a tuft of grass or so, and a few big stones ; then you can drop grubs and flies,

and beetles, and earwigs, and woodlice near to him, and watch him catch them.

If ever *you actually see* his tongue go out, *and* go back again, I will give you half a pound of the best chocolates next time I see you!

Like his cousin Croaker, Toady sleeps the whole winter time in some hole where Jack Frost cannot reach him; and when the spring sun shines, and the birds begin twittering to one another, he comes out again determined still to be the gardener's friend.

"SAM TROUT."

Now come with me, because father has to go to London to see about some very important business, and I will take you down to the shallows and pools in the stream just over the lea fields, and show you "Sam Trout".

I call him Sam because he belongs to the SALMON tribe, but his own name is SALMO FARIO; so you see he is a relation of the great big salmon who is so much sought after by fishing men. So is Sam Trout for that matter.

Now if you are to get a good view of him, we must be very careful, because his eyes are so very sharp, and even your shadow falling on the water would scare him away for a little while.

Let us lie down and wait and watch by this bush, keeping very still.

Hullo! what is that? Yes, there he is. Can you see his golden, greeny, silvery back and sides, and his black and bright red spots on his sides? He *is* beautiful, very beautiful—isn't he? He lies perfectly still in the water just under the bank where the big tree roots run down into the water, his head always pointed up the stream.

If you look carefully you may see him gently moving his fins and tail in order to keep himself in the same place. I should think that if we were to catch him, and put him in mother's weighing scales, we should find he is nearly four pounds in weight!—and that is a very nice size. Sometimes Sam Trouts are caught weighing eight, and nine, and ten pounds; and it is very good sport catching Sam Trouts of this size.

Every little stream in England, and Ireland, and Scotland, and Wales have Sam Trouts in them of all sizes. I have caught many with my hands in the little shallow pools in a tiny stream close to my old home, and then taken them home in a large tin can. But old Jane would never cook them for me, for when I ever asked her to do it, she said, "Oh, get along, and don't come moitherin' me with your rubbitch".

So I had to fry them myself, and I ate them just because I had cooked them, though they were as dry and tasteless as bits of stick.

Mrs. Sam Trout lays hundreds and hundreds of tiny eggs in the stream, which after a time hatch; and you

never saw such funny little things as the little Sam Trouts appear when they are first out of the egg.

They have each a great bag on their little "tummies" which contains their food. Soon, however, the bag disappears as the food is used up, and even then they are rather funny looking, and not a bit like their beautiful father and mother. It is a long time before they are as large and fine!

Sam Trout is very fond of catching flies that fly over the top of the water. He swims just under them, and then with a rush darts his head out of the water, and down goes Mr. Fly into the "Red Lane"!

He only catches his dinner in this way when the water is clear, for when the water is muddy, after heavy rains, he feeds on the little water insects.

Fishing men love catching Sam Trout by means of rods and lines and home-made flies. I say "home-made" because the flies they make all by themselves out of different coloured bits of feathers and silk threads are better to fish with than the shop ones—at least so they say.

The cleverest of fishing men make their own flies, because they know exactly what kind of flies live by their particular streams, and just what these flies look like. Only people who have no time, or are too lazy, or are unable to use their fingers, buy those they sell in shops. You will, of course, make your own flies when you are old enough to fish.

The fly is tied on to the end of the fishing line, and Sam Trout thinks that it is a nice fat May fly or green drake slowly going along just above him, and he makes a dash at it, only to find that he has made a great mistake.

He finds it out too late, for the fly is made on a hook, and the hook has become fast in his lip; and then he fights all he knows to get away from the hook, and line, and rod, and the man at the end of it. But all in vain! He gets weaker and weaker, until at last the man gradually draws him nearer and nearer to him, and then when he is near enough, slips a net under him, and out he comes on to the grass! And the man then weighs him and measures him—then eats a sandwich!

Sometimes Sam Trout is caught with worms on hooks and things called spinners, and live minnows on hooks and artificial minnows, but I must not tell you anything about that, because it is not exactly Natural History.

Some years ago I went for a holiday in the west of England with some friends. We had been told that we could fish in the stream, and have plenty of rabbits to shoot; but when we got down there, we found that the stream was only a few feet wide, and not any use for fishing. I think there was *one* rabbit, and he took great care to keep out of our way, and was always a very long way off when we caught sight of him.

Well, one of my friends thought he would fish, and one day went to the largest pool to try, but lost part of his line and his fly in the bushes, because there was no room to cast a fly properly. He then got a gilt spinner and tried that.

Now, all the while he was fishing I was wandering up and down the banks of the stream, watching the water rats and birds and insects, and I saw lots of nice little Sam Trouts lying in the shallows, and began to wonder how I could catch a dishful for supper.

I knew it was no use attempting to catch them with rod and line, but at last I suddenly thought of a Colt rabbit rifle I had taken down with me. So I went home, and brought it out, and quietly strolled up the stream, and when I saw one of these little Sam Trouts, I aimed just a little under him and pulled the trigger! Then with a flop, flop, the little chap turned wrong side uppermost and floated down the stream, but I reached him in with a net I had brought with me. You see I did not shoot at him to kill him with the bullet, but only to stun him with the force of the bullet striking the water. If I had hit him with the bullet, he would not have been fit to look at. I did hit one or two of them, unfortunately.

My friend "The Fisherman" was still throwing his gilt spinner when I came back down the bank, and when I showed him between fifteen and twenty

little Sam Trouts about eight inches long, he wanted to know how I had caught them, and when I told him he was surprised, and I *think* rather annoyed!

It is really most unsportsmanlike to shoot Sam Trouts or any other fish, and I should never dream of doing that as a rule. As a matter of fact, I only tried the experiment of shooting them because there was really no other way of catching them for table.

Don't you try and shoot them, or people will tell you you are no sportsman; guns and rifles are for birds and animals, and fishing tackle for fish.

Now let us go home to tea.

MR. JOHN PIKE.

Mr. John Pike is a very fierce-looking old fish. Indeed, he *is* fierce, and all the other fish are quite afraid of him, quite as much afraid of him as you are of lions and tigers; and no wonder, for he eats them all up whenever he can catch them!

He is a member of the Esocide family, and is called Esox Lucius.

He is long, and his head is long, with a wedge-shaped nose, and large mouth, and sharp teeth.

When John Pike has grown well, and eaten well, he sometimes weighs nearly forty pounds, and is between three and four feet long! Think of the

enormous number of other poor fishes he must have eaten to grow to such a size.

His real name is Pike, though he is more often called Jack when young, so I have called him John Pike to make quite sure.

He lives in rivers, and canals, and lakes, and large ponds, where he stuffs himself as full as he possibly can with all kinds of fishes, and frogs, and worms, and even poor Old Water Rat is sometimes caught by those cruel jaws of his, and swallowed whole !

John Pike is quite the most greedy of all our fishes, and never knows when he has had enough to eat; and gentlemen who have miles of river which they keep for Sam Trout fishing, simply hate him like poison, for he eats great numbers of young Sam Trouts, and then of course the Squire cannot have his favourite fish dish so often.

I am annoyed too, because I like Sam Trout much more than any other fish I know.

Yet, with all his nasty ways, he is rather sought after, because he is a good fish to catch and land, and he fights rather well. But the fishing tackle must be very strong to hold a thirty-pound John Pike ! and when you have landed him you have to be careful when handling him, or your fingers will be severely bitten—and that is not at all pleasant, I can assure you.

He likes bird flesh too, as poor mother moor-hen knows; for he swims quietly under her poor little

children as they are sitting on the top of the water, and then suddenly rushes up with open mouth, and the poor little baby moor-hen is dragged down and eaten ; and other members of his family go the same way, even the father and mother moor-hen !

I don't like him for that, because surely there is quite enough food in the ponds, lakes, canals and rivers for him to eat without pulling down poor little baby moor-hens and their fathers and mothers.

Why, he even pulls under the water the young wild-ducks !

I suppose we must not be angry with him, because Mother Nature told him in the Beginning that he must do that kind of thing, but I cannot help being a little annoyed with him, especially when he pulls down young wild-ducks. I know it is selfish of me, and other men too, because we like shooting and eating wild-ducks !

That reminds me ! I have not replied to that invitation I received the other day to go to a part of Lincolnshire to have some duck shooting ; so I must say good-bye for a little while ! Good-bye !

THE STICKLEBACK.

And a very good name too ! and when you see him *you* will say so !

I will tell you in a minute why he is called "Stickleback".

To begin with, I must tell you that Sticklebacks have the GASTEROSTEIDÆ family all to themselves; so you can imagine how proud they must feel—and the long name, too! No wonder that they won't speak to any other fish. If you had a name like that you would be just the same, though it would be rather a fag to write it! Wouldn't it?

Stickleback is quite a common fish, just as common as the minnow, but he has more brains, I think, and is therefore more clever. Boys catch him with a switch for a rod, a piece of cotton for a line, a bent pin for a hook, and a piece of worm for bait. I caught lots and lots when I was a boy and kept an aquarium.

Sticklebacks live together in great numbers in streams, and lakes, and rivers; and the Squire dislikes him tremendously, because he has such an appetite for the very young Sam Trouts, and he eats thousands of them. He does not know that he is doing a wrong to the Squire; if he did, perhaps he would not do it, but the wrong is done, and it cannot be helped.

A gentleman named Pennant once wrote that a farmer in Lincolnshire had a stream so full of Sticklebacks, that he paid a man to catch all he could, and this man caught so many that he sold them at one halfpenny for a bushel, and made four shillings a day; so you see he must have caught at least ninety-six bushels a day!

What a tremendous number of Sticklebacks there

must have been in the stream, and what an awful amount of damage they must have done amongst the young Sam Trouts.

Stickleback makes a nest, actually makes a nest, in which Mrs. Stickleback lays her eggs, and he guards this nest day and night, and fights every other Stickleback who comes anywhere near it, and very often kills his opponents with those spines on his back. He fights at any time, and with any Stickleback he comes across. Fancy pretty little fishes fighting like that! Just like boys at school, always fighting!

"SLIPPERYWRIGGLE."

This is just what Mr. Eel is, very slippery and very wriggly, so much so, that I don't think you could hold him for one second if he were alive and kicking!

He belongs to the Murænidæ family, and his aquarium name is Anguilla Vulgaris.

He is a long snake-like fish with a long fin down his back, and along the latter part of the under side of his body, both uniting at his tail. He has a fin on each side of his head just behind his gills.

His colour is dark olive-green on his back, shading down his sides into a lighter colour, and his stomach is whitey yellowy grey.

He lives in mud—yes, in mud! Mud is very nasty to have on your hands—but to live in it! Ugh!

Though he lives, and wallows, and wriggles, and bubbles in the mud, he is caught, and eaten stewed with chopped parsley—a dish I am not at all fond of, thank you very much!

He lies buried in the mud with only his head and a little of his neck out, and there he waits for stray worms and things.

Very often a stray worm drops down near him, on a good-sized hook, and he at once snaps it up without pausing to look at it twice to see whether or no it is safe to eat. Then the next moment he is very sorry for himself, for he finds that the hook with the worm on it is fastened to a line, and at the end of the line is a fishing man, who pulls and pulls at him to haul him up.

Slipperywriggle does not give in without a struggle though, for he curls and stiffens himself in the mud and hangs on for all he is worth. But all to no purpose, however; the hook and line are strong, and suddenly he gives way, and is drawn up wriggling and twisting like mad--and the fishing man eats another sandwich!

Slipperywriggle varies in length from eighteen inches upwards. He is often caught measuring three feet, and sometimes more than that; and he can live a long time out of the water. You can see lots of Slipperywriggles in tanks in the front of fish-

mongers' shops, and, as you know quite well, mother always buys them alive, because they are better flavoured.

He is found in rivers, ponds, lakes, canals, and in the mud in docks, where the big ships go to discharge their cargoes, but the river Slipperywriggles are best and cleanest. So you must always eat these and no other.

GREEN DRAGON.

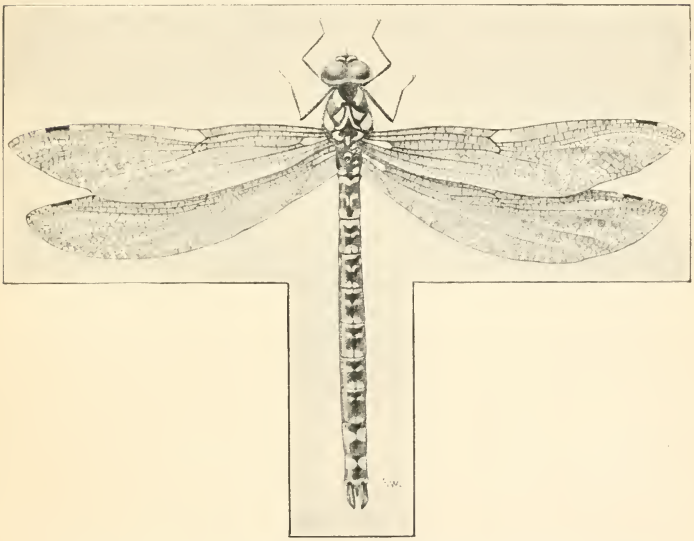
You must not think that this will be all about great big crawling and flying dragons, that go about all over the world eating pretty princesses and getting killed by handsome princes, who marry the pretty princesses, and live happily ever after.

It is not about them at all, but about a most beautiful fly, whose chief colour is green, and who is not a bit like a horrible dragon. Why they call him *Dragon*-fly, I don't know; perhaps it is on account of his long tail, and his way of turning it up and down.

Country people in Shropshire call him "Sting-fisher," and say that he is a venomous fly, and will sting you badly, and probably kill you. This is the most nonsensical of nonsense. He cannot sting you because he has no sting; in fact, he cannot hurt you at all in any way. He only hurts flies, and only those because he eats them for his breakfast, dinner and

tea, and of course as he eats them, he must hurt them. If you were to eat live sheep, and cows, and pigs, and chickens, you would hurt *them;* and I have just thought of it, they might hurt *you* if you tried!

Green Dragon belongs to the ORTHOPTERA order of



insects and the family LIBELLULIDÆ, and his own name is AESHNA GRANDIS.

In the beginning he comes from an egg which is laid in the water by his mother, and in time this little egg hatches, and out pops the little larva, who is always very hungry and eats tremendously all kinds of water insects. It grows and grows until it is

a great size. It catches and eats tadpoles, and the larvæ of other insects, and the insects themselves.

I used to keep the larvæ of water insects, including dragon-fly larvæ and tadpoles, and the tadpoles were always caught and eaten by these dragon-fly larvæ; but it made them grow well, so I did not much mind, because I wanted to see them grow into the perfect insects.

The larva has a very curious arrangement with which it catches its food. It is a kind of arm with two claws, which is hinged under its chin, though if you saw it in the water you would wonder how it could catch tadpoles and other things; but when any poor little insect happens to swim past, it shoots out this catcher arm and grabs the poor little thing, and draws it in and eats it up quite ravenously. This "catcher" is called a "mask".

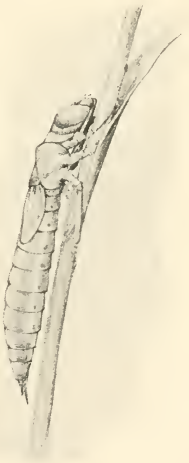
The larva certainly is not what you would call beautiful, but I suppose he gets along very well in life without beauty, for he knows that "beauty will not fill a table with a good dinner!"

When the larva pops out of the egg, he is called a nymph, and has to put up with all the cold winter months. In the winter, of course, he has to keep himself as warm as he can in the bottom of the pond.

When the summer comes, and he is full grown, and has had plenty to eat, he comes to the surface and crawls up a reed, and fastens himself there, because he knows that that is what he *must* do, to get

out into the warm sun and finish his part of the work of his life.

Presently the case cracks across, and the head and shoulders of the Green Dragon burst out; then in a little while a little more of the body comes out, and swings backwards and downwards to give him greater power for the next movement, and this is the last one. Up goes his head and out comes the rest of his body—the Green Dragon!



Now, his wings have not yet grown sufficiently, so he sits there above the empty case, letting the warm sun dry, and set, and straighten out his wings. There he stays for quite a long time—hours, in fact.

When his body has lengthened and his wings are now perfect, off he flies to try his wings, and then rest after his violent exertions.

Then he sets about catching something to eat, for after all this work he must be hungry.

He catches his fly food with his six feet, and with them takes it to his mouth, and crushes, and chews,

and champs it up with his big jaws, and so makes a hearty meal.

Poor Old Green Dragon only lives in his perfect state for a little over three months, and then he has to die! Are you not sorry for him? I am; for if I were as beautiful as he in all his gorgeous colours, I think I should like to live for ever and a day.

He looks beautiful in his emerald green and dark brown marking and blue and yellow spots, and somehow he reminds me of the kingfisher in his colours and his habit of flying up and down streams.

Sometimes he flies up and down lanes, up and down, up and down one particular spot, and to catch him you must be very quick with your net, for he is so very quick, and dodges most wonderfully, and you must sit or stand still and watch and wait patiently until your patience is rewarded with a perfect specimen of the Green Flying Dragon.

"HOP O' THE GRASS."

HAVE you heard, while walking through the fields, a curious kind of small noise which seems all round you as it were, a kind of chirrrrreee—chirrrrrruee—chirrrrrruee noise? Well, if you have, you must know that somewhere close handy is a Grasshopper or Grasshoppers, or "Hop o' the Grass," as we will call him.

You immediately looked for him, but could not find him. Do you know why? I will tell you; because he is green and so is the grass! so, of course, it is no wonder you were unable to see him; even when you do see him, and wish to catch him, you will find it rather difficult on account of the quickness of his movements. Persevere, and you will soon be able to catch him without doing him any damage.

Hop o' the Grass belongs to the order ORTHOPTERA, family ACRIDIIDÆ, and is called LOCUSTA VIRIDISSIMA.

You can hear him singing in the grass and herbage by the roadside on a summer day, and in the fields, singing merrily one to another in the bright sunshine.

His hind pair of legs are much longer than his other two pairs. Look at that great long thigh, full of muscle! These long legs he uses to jump with—and he *can* jump, too!

If you could jump as well, in comparison with him, you would be able to jump quite easily over the village church! Just think of that! But though he jumps so well, he cannot jump as high, or as far, in comparison as that very much smaller, horrid, wicked, nasty, irritating, annoying, make-you-wriggle-very-much insect—Ugh! I must say it in a whisper —the flea!!!

Hop o' the Grass begins his life in the egg laid by his mother on the stalks of grasses; then he is

hatched, and looks very like his mother, only of course much, very much smaller, and has no wings; but he soon grows, and as he grows he sheds his skin several times until he grows to his full size.

Hop o' the Grass eats grass, and the green leaves of the corn, but I don't think any one takes much heed to him on that account, so of course he cannot do much harm.

I have not found many of him in the garden, though I have found several kinds in the fields of different sizes. Some are large, some are small, some are green, and some are grey, or drab, or browny in colour.

Hop o' the Grass has wings, and can fly as well as jump. What an extremely lucky insect he is! Now you and I cannot even jump as he can, setting aside flying. We can only walk and run, and travel in trains, and tubes, and boats, and 'buses, and in motor cars, on bicycles, and things, and all the time he is laughing at us because we cannot travel as he can! Lucky little chap! Isn't he?

I have much more to write about, so I cannot stay to say anything more about Hop o' the Grass, because I have so much more to write about, so we must leave him alone for a little, and say "*Au revoir*, Hop o' the Grass!"

THE SLUG.

THOUGH some people call him slimy and ugly, I think that if you look well at him, you will find that though he is cold and slimy, he is not what you might call ugly.

After a heavy rain he comes out of his hiding-place, and slowly crawls along on the hunt for some nice juicy plant, or a nice fat worm, or a little dead animal, and at such times you may count slugs in hundreds by the roadside in the late afternoons and evenings.

He belongs to the MOLLUSCS, class GASTROPODA; his family name is HELICIDÆ.

But just fancy a slug having such a name as ARION EMPIRICORUM! for that *is* his name.

He has no bones in his body, not even a little one of any sort.

His colour is nice and black, or very dark grey. Sometimes he is quite brown, sometimes dirty yellow.

He has a soft kind of shield on his back just beyond his head, and on his head are four horns or tentacles, which are also soft; in fact, he is all soft, every bit of him.

He has only *one* nostril, and that is in the side of the forward end of his shield; but it is quite big enough, for if it were not, he would have two, wouldn't he?

When he is crawling along at the very fast rate of perhaps forty miles a year, you will see that he is sometimes four or five inches long.

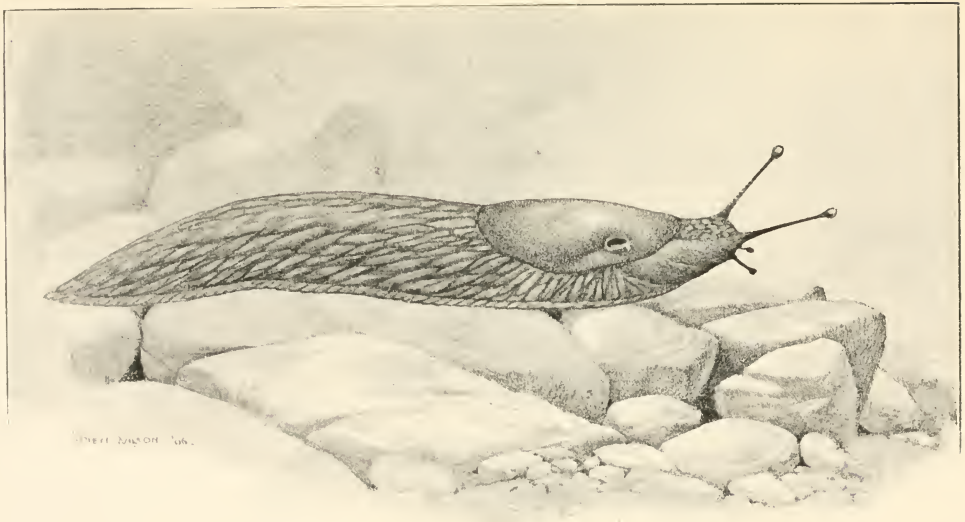
Cows would look very funny if their eyes were in the tips of their horns, wouldn't they? Well, Slug doesn't, and *his* are on the tips of his horns! But then, you see, cows and slugs *are* a little different one from the other, aren't they?

When he crawls, he leaves a shiny rainbowy trail or track behind him, and it is not difficult to track him down in the country road, or over the wall by the roadside.

He eats all kinds of green stuff, and often I have seen him eating earthworms, and the dead bodies of birds; so you see he likes flesh with his meals sometimes, by way of a change.

Father simply hates him when he comes into the garden without being invited, because he will persist in eating his plants, and he always chooses the best and most valuable ones to make a supper of. So father always kills him by putting a pinch or two of salt on his tail whenever he sees him.

It is curious to see the way Slug draws himself up into a hump when you touch him. He cannot bear to be touched at all, and if he thinks that by drawing himself up in that funny fashion he will escape being killed, he is much mistaken, for down comes the salt, and Mr. Slug is no more. When you are grown up, and have a garden all to yourself, you



Slug.

will find that salt is a very good medicine to cure Mr. Slug of the nasty habit of eating your plants. I have found it very good.

Slug is the largest of all the Slug family we have in England. Some are very tiny, but they are just as tiresome as their big cousin, and father does not like them any better; so he gives them all the same medicine. All the same, you will find that Old Slug is well worth having a good look at.

MAGPIE MOTH.

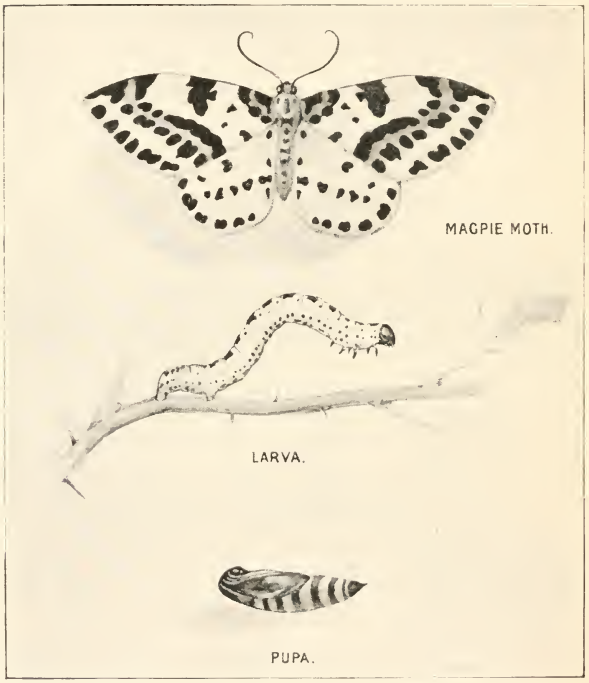
This little moth is quite beautiful in his clothes of motley, white and black and yellow; but beautiful as he is, he is a great pest to gardeners. He is a perfect nuisance. Sometimes he is quite a plague, for his larvæ eat the leaves of the gooseberry bushes, and I have seen whole rows of bushes with only the veins of the leaves left. Then, of course, where is the gooseberry fool, the gooseberry pie, the stewed gooseberries and cream, and where are the gold coins in the market gardeners' pockets? Gone! gone! gone! to paint the moths' new clothes!!

Here you may see him, and of course you can easily understand how it is he is called Magpie from his black and white colouring.

He belongs to the Lepidoptera order and the family Geometridæ, and on his label in the case at South Kensington is printed Abraxas Grossu-

LARIATA, and he is as naughty as his scientific name is long!

The caterpillar or larva is what is called a Looper,



that is, when he takes his walks abroad on the gooseberry bushes he "loops" himself along as the picture shows you, so he cannot have any bones in his back or he would not be able to do this sort of thing.

There are many other caterpillars who "loop" themselves along in this funny way. So they belong to the same family, and consequently are cousins to Magpie Moth.

The larva is spotted yellow, white and black just like the perfect insect, and the pupa has yellow bands or rings about it.

When I see a Magpie Moth I always kill it, after I have had a good look at it. You may think me very cruel, but when you have a garden of your own, you will follow my example, especially if you are as fond of gooseberries and currants as I am (and you are not a boy if you aren't !). When you catch him, you will find that he has a very curious habit of pretending to be dead, and a very good "pretend" it is, for he shuts up his wings and lies flat on his side with his legs tucked up. Leave him alone for a while, however, and off he goes again laughing (only you can't hear him) at you, and thinking how easily he tricked you.

He always does that with me, but I make sure that there is no doubt about his "being dead" !

Many other insects pretend to be dead when caught. Spiders do.

So do men sometimes when *they* are caught !

DEATH'S HEAD.

Don't you think this rather a frightful name to give this moth? And yet it is a very good name to give him, because on the back of his thorax there is a very good picture of a skull and two bones crossed underneath it.

Really it is a most extraordinary picture, and reminds me of the old pirate stories I read when I was a boy. It is exactly like the pirate captain's black flag.

He belongs to the same order as Magpie Moth, but his family name is Sphingidæ, and his own name is Acherontia Atropos.

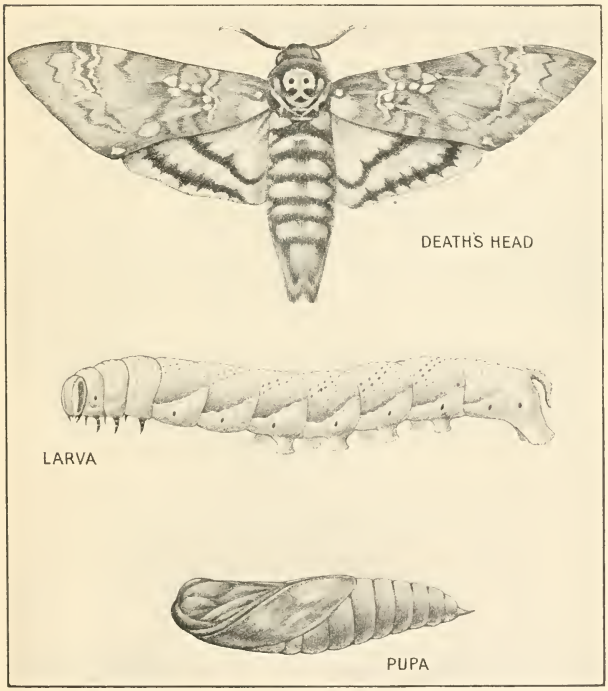
He is a great big moth, and beautiful. He is quite the largest moth we have in England, being quite five inches from tip to tip of his wings.

His colour is dark, a kind of dull brown-purple colour on his upper wings, with yellow lines and spots on them. His under wings are dullish yellow, with wriggly black bars on them. His body is the same colour as his wings, only it has black rings round it and yellow patches down each side.

If you would like to catch one, you must go into Farmer Blenkinsop's potato fields with father one evening when it grows dusk, and if you watch carefully you may see and catch one.

If you are successful, you must not be frightened

when you take him out of your net, for he is sure to cry out when you touch him. He really does cry, but it is only a kind of squeak! squeak!



The first time I took one up, I was so surprised that I dropped him and he flew away, and my father was quite sorry, because he wanted a new one, as the

nasty little mites had begun to eat the others he had in his cases.

I have since told people that the Death's Head Moth squeaks, and they say to me, "Don't be so silly! How can a moth squeak?" You will find it quite true, though!

Death's Head's larva is found on potato plants, and the pupa in the ground when Farmer Blenkinsop has his potato crop dug up.

The larva is green with broad pale yellow rings round his body, with yellow, black-spotted stripes running upwards across his sides, and a spikey sticky-up tail.

Death's Head feeds on the sap of the big trees and is very fond of honey, as the bees know so well.

If you catch a Death's Head Moth, please send it on to me at once, and perhaps I will tell you something more about him. Will you? Yes? Thank you very much!

If I were to sit down and tell you all about the other moths, and butterflies, and insects, I should not finish the work in years. So I must leave it till some future time. We shall see!

Now, my dear kiddies, I have finished my little book, but before I say "Good-bye!" I must tell you how sorry I am that I have not written more. I have only told you about some of those little creatures which are most easily seen and heard in our England; but some day I may write to you of creatures

of other parts of the Big World. I am not quite sure yet, but I will see.

Read again the little preface at the beginning of this book.

"GOOD-BYE."

Your friend,

THE AUTHOR.

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